

10/07/2026

Housing Supply and Delivery

Economic Development Queensland

Jonathan Woolmer

Via email: Jonathan.Woolmer@edq.qld.gov.au

RE: EPBC Assessment of Significance Technical Memo for Sub-Precinct C
CQU Rockhampton Priority Development Area (PDA) Masterplan, QLD 4701

Dear Taylor and Jonathan,

Please find enclosed a technical memorandum prepared by Therefor Group Pty Ltd to supplement the *Environmental Protection and Biodiversity Conservation (EPBC) Assessment of Significance Self-Assessment* prepared for the broader Central Queensland University (CQU) Rockhampton Priority Development Area (PDA). This memo provides a site specific EPBC self-assessment for Sub-Precinct C within the PDA and is intended to advise upon EPBC-related constraints / impacts relevant to the stage of precinct development.

1. Introduction

1.1 Preamble

Therefor Group Pty Ltd has been engaged by Economic Development Queensland (EDQ) (hereafter referred to as the client) to prepare an EPBC Assessment of Significance for the CQU Rockhampton PDA, with the aim of providing advice regarding the proposed action and its likelihood to have a significant impact on Matters of National Environmental Significance (MNES) under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*.

The broader CQU Rockhampton PDA is located at CQU's Rockhampton North campus in Norman Gardens, bounded by Yeppoon Road to the north and Yaamba Road to the west, encompassing Lot 1 on RP613177 and Lot 70 on SP304746 with a combined area of approximately 168.13 ha. Within this PDA, Sub-Precinct C occupies the south-eastern portion and fronts Norman Road, with its northern boundary along Darambal Road. The subject site for Sub-Precinct C currently forms part of Lot 70 on SP304746 and is understood to be subdivided as Lot 22 on SP362652, with an area of approximately 15.7 ha, within the Rockhampton Regional Council Local Government Area (LGA).

1.2 Purpose of this Memo

The purpose of this memo is to supplement the PDA-scale EPBC self-assessment with a site-specific assessment for Sub-Precinct C, having regard to the confirmed development layout and disturbance footprint now available for that area. The PDA-scale assessment was prepared on a precautionary worst-case basis across the full PDA footprint; this memo refines those findings to the specific Sub-Precinct C area fronting Norman Road.

A summary of the site details and relevant ecological and bushfire development constraints within this response is outlined in **Table A**.

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Table A - Site Summary Details

Item	Details
Address	Norman Road, Norman Gardens QLD 4701
Plan Detail	Currently part of Lot 70 on SP304746, proposed Lot 22 on SP362652
Total Area	Approximately 15.7 ha
Council Zoning	Currently zoned "Community Facilities". Falls within the CQU Rockhampton PDA Priority Development Area proposed for "Urban Living" land use.
PMST Screening Output	PMST 5 km buffer: 1 World Heritage property, 1 National Heritage place, 2 TECs, 49 listed threatened species, 29 listed migratory species
EPBC Referral Advice	Development of Sub-Precinct C is unlikely to have a significant impact on any MNES; EPBC referral is not recommended based on current information.

1.3 Assessment Overview

Environmental regulation at the federal level is driven by the *EPBC Act*. The primary purpose of which is to provide for the protection of MNES, including World Heritage places, National Heritage places, Ramsar wetlands, nationally threatened species and ecological communities, and migratory species. Any action likely to have a significant impact on any of these protected matters may require referral to the Commonwealth.

This memo draws on the desktop review, ecology technical report, protected plants flora survey and PMST results documented in the parent assessment (**Attachment 1** refers), applying those findings to the confirmed Sub-Precinct C footprint. The *Significant Impact Guidelines* 1.1 (DoE, 2013) are used to determine whether a significant impact may result from precinct development.

1.4 Data Sources and Approaches

This memo draws on the same ecological information base used in the parent PDA-scale assessment in addition to proposed clearing plans for Sub-Precinct C, specifically:

- AECOM's Ecology Technical Report (April 2026) for the CQU Rockhampton PDA, documenting field-validated regional ecosystems, threatened ecological communities, fauna habitats and conservation significant fauna values across the PDA and its surrounding.
- AECOM's Protected Plants Flora Survey Report (April 2026), confirming the presence of Marlborough Blue (*Cycas ophiolitica*) within the broader PDA.
- *EPBC Act* Protected Matters Search Tool (**PMST**) results for a 5 km buffer around the PDA, generated June 2026.
- Queensland Government WildNet conservation significant species records.
- Recent aerial imagery and LiDAR topographic datasets.
- Subdivision plan Lot 22 on SP362652 for Sub-Precinct C
- Concept Erosion and Sediment Control Plan prepared by Topo Group (June 2026), providing clearing layout and disturbance footprint within Sub-Precinct C.

1.5 Key Definitions

For the purpose of this memo:

The **Subject site** refers to the area demarcated for development within Sub-Precinct C of the PDA, currently part of Lot 70 on SP304746, proposed Lot 22 on SP362652, fronting Norman Road, Norman Gardens (~15.7 ha).

The **Study area** refers to land within approximately 150 m of the Sub-Precinct footprint.

The **Locality** refers to land within approximately 5 km of the subject site.

1.6 Limitations

This memo is intended to supplement the parent PDA-scale EPBC assessment and is not provided as a standalone assessment. The clearing layout is based on Topo Group's Concept Erosion and Sediment Control Plan (dated June 2026). Being a concept-level plan in the event that materially different clearing extents are ultimately approved, the outcomes of this assessment should be re-visited to ensure consistency with recommendations.

It is noted that only a formal referral decision by DCCEE can provide a binding determination under the *EPBC Act*.

2. Site Analysis

2.1 Site Location and Characteristics

The subject site comprises Sub-Precinct C on the southeastern side of the broader CQU Rockhampton PDA. The site currently forms part of Lot 70 on SP304746 and is understood to be subdivided as Lot 22 on SP362652, with a total area of approximately 15.7 ha (Figure 1), within the PDA. The site fronts Norman Road with Darambal Road binding its northern boundary, while the broader PDA extends west to Yaamba Road and north towards Yeppoon Road. The site is situated approximately 4 km north-east of the Rockhampton CBD.

According to AECOM's field-based regional ecosystem mapping, Sub-precinct C predominantly consists of RE 11.3.4 regrowth (*Eucalyptus tereticornis* and/or *Eucalyptus* sp. woodland on alluvial plains), with small pockets of RE 11.11.15 remnant vegetation (*Eucalyptus crebra* woodland to open woodland on deformed and metamorphosed sediments and interbedded volcanics) and non-remnant mixed woodland vegetation within modified landscapes, adjacent Darambal Road, in the northern limits of the subject site.

The subject site occurs in an urban-fringe context, with surrounding residential neighbourhoods and urban development to the south and east, and the balance of the broader PDA to the west and north. Limestone Creek Conservation Park is located across Yeppoon Road to the north of the broader PDA. Previous ecological investigations describe the PDA as a mosaic of remnant vegetation, regrowth vegetation and modified areas.

2.2 Site Topography

The Sub-Precinct C area occupies the southeastern parcel of the PDA. Land generally drops from Norman Road and Darambal Road (approx. 38 m ASL) to the drainage depression toward the centre of the subject site (approx. 30 m ASL) at approximately 1.1° gradient. The site is expected to be modified to achieve grades suitable for residential development.

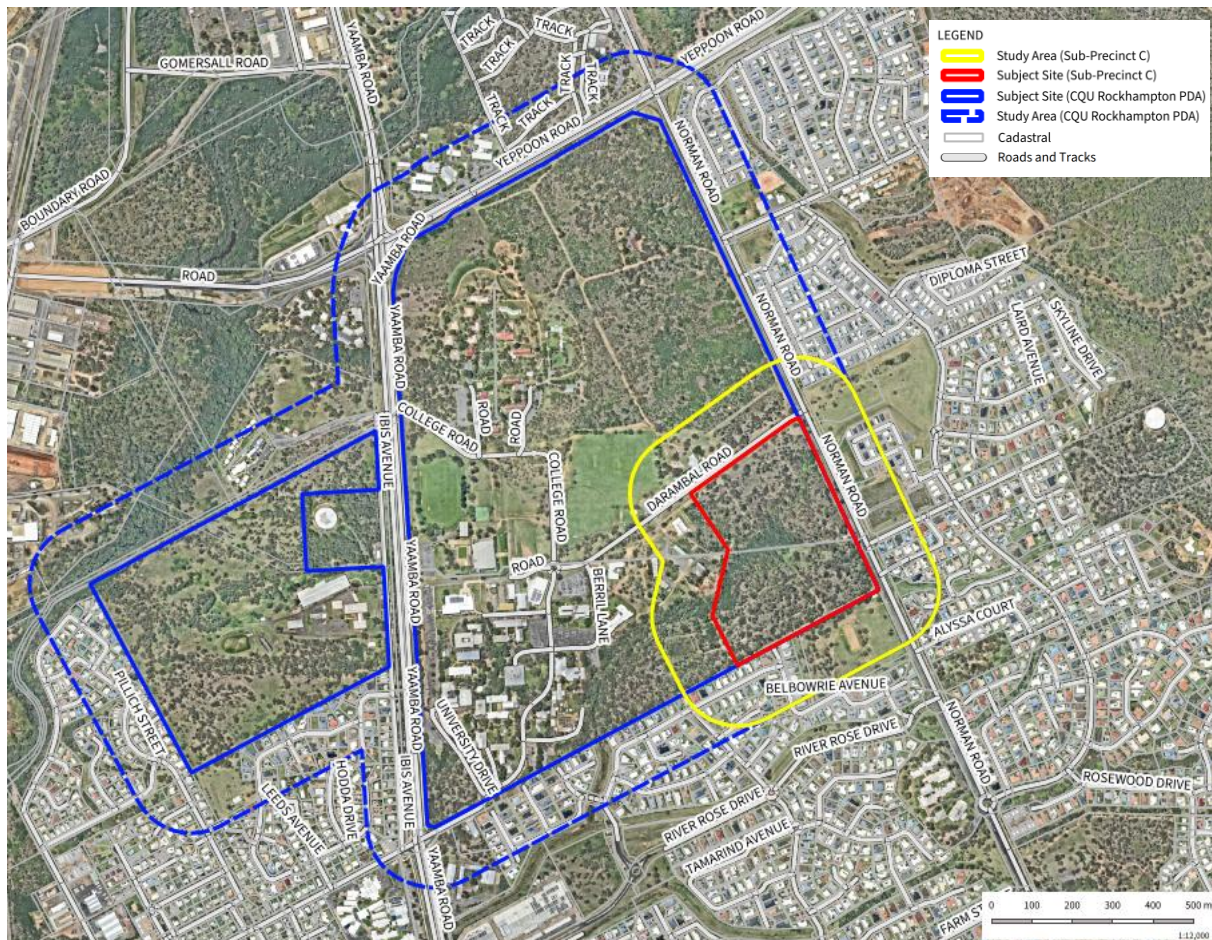
2.3 Geology and Soil

The subject site occurs within the Brigalow Belt Bioregion (Bioregion 11). The eastern parcel overlies Early Permian sedimentary units (Chalmers Formation Pkc and Lakes Creek Formation Pkl) and Quaternary alluvium. These substrates correspond to land zones supporting vegetation communities consistent with AECOM's field-based regional ecosystem mapping.

2.4 Current Land Uses

The subject site is located within the Rockhampton Regional Council LGA and is within the CQU Rockhampton PDA, which is zoned for urban living use, within a broader landscape that includes larger, more continuous conservation areas such as Limestone Creek Conservation Park and Mount Archer National Park to the north. Currently, the precinct footprint is generally un-improved and holds retained vegetation.

Figure 1– Location of Sub-Precinct C



3. Development Proposal

The proposed action involves the clearing and subsequent urban development of Sub-Precinct C, including residential development and associated infrastructure, consistent with the CQU Rockhampton Urban Development Area Development Scheme.

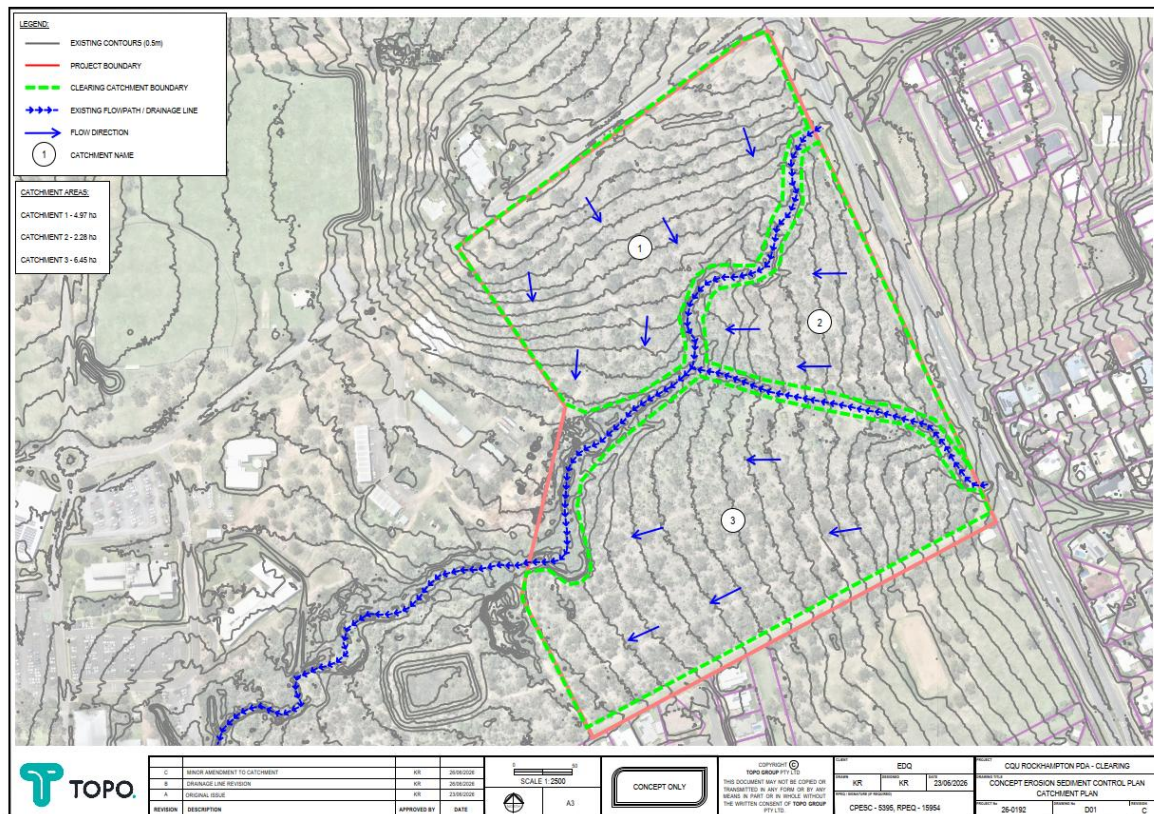
Based on the Concept Erosion and Sediment Control Plan (**Figure 2** refers), the initial phase of works involves vegetation clearing of the entire 15.7 ha subject site. The clearing footprint encompasses the full project boundary, the southern portion of Lot 70 on SP304746, east of the CQU Rockhampton North campus, west of Norman Road and south of Darrambal Road.

The site is divided into three clearing catchments:

- Catchment 1: 4.97 ha
- Catchment 2: 2.28 ha
- Catchment 3: 6.45 ha (total active clearing: ~13.7 ha)

The existing flow paths / drainage lines are understood to remain undisturbed as part of the proposed clearing methodology.

Figure 2 – Concept Erosion and Sediment Control Plan (Topo Group, 2026)



4. Desktop Assessment

4.1 MNES Desktop Assessment Overview

The PMST was used to identify MNES that may occur in or relate to the subject site and surrounding locality (5 km buffer). The PMST results presented below were generated for the full CQU Rockhampton PDA and are reproduced here in their entirety, as the 5 km locality buffer is functionally equivalent for Sub-Precinct C. Given that Sub-Precinct C occupies the southeastern portion of the same PDA footprint, no additional PMST search was warranted, the MNES matters identified at the PDA scale are equally applicable to this sub-precinct-level assessment.

The PMST results identified the following matters that may occur within or near the subject site:

- one (1) World Heritage property
- one (1) National Heritage place
- two (2) listed threatened ecological communities (TECs)
- forty-nine (49) listed threatened species
- twenty-nine (29) listed migratory species

The full PMST report is provided in **Appendix A of Attachment 1**. These PMST outputs were cross-checked against AECOM's field-verified ecological values, WildNet records, Atlas of Living Australia records and Queensland regional ecosystem mapping. The relevance and significance of these MNES to Sub-Precinct C are considered further in **Section 5**.

4.2 World Heritage Properties

The PMST identifies one World Heritage property within the 5 km search area, namely the Great Barrier Reef World Heritage Area. This is mapped along the Queensland coast, approximately 23 km east of the subject site, within marine and coastal environments associated with the Fitzroy River estuary and offshore waters, and does not overlap the inland terrestrial Sub-Precinct C footprint.

4.3 National Heritage Places

The PMST identifies one National Heritage place within the 5 km search area, namely the Great Barrier Reef National Heritage place. This applies to the same coastal and marine extent as the World Heritage Area and does not overlap the inland terrestrial Sub-Precinct C footprint.

4.4 Listed Threatened Ecological Communities

The PMST identified two TECs as potentially occurring within the locality. A review of the DCCEEW Species Profile and Threats Database (**SPRAT**) and regional ecosystem mapping has indicated that the TECs correspond to the relevant regional ecosystem communities (in QLD) listed in **Table B** below.

Table B - Regional Ecosystems potentially containing TECs

Community	Regional Ecosystems
Poplar Box Grassy Woodland on Alluvial Plains	RE 12.3.10
Weeping Myall Woodlands	RE 11.3.2, RE 11.3.28

The State's regional ecosystem mapping, AECOM's field-based regional ecosystem mapping and targeted TEC assessment did not identify any vegetation stands within the PDA meeting the diagnostic characteristics or condition thresholds for either TEC. Canopy species within Sub-Precinct C are primarily *Eucalyptus crebra*, *Eucalyptus tereticornis* and *Corymbia dallachiana*, consistent with RE 11.3.4 and RE 11.11.15, not the TEC-associated RE's.

4.5 Listed Threatened Species

The PMST identified forty-nine (49) threatened species while WildNet search identified twenty-four (24) EPBC-listed species within 5 km of the PDA. A likelihood-of-occurrence assessment was conducted on these species to determine which species are considered to have the potential to occur within the PDA. The full list of EPBC-listed threatened and migratory species identified from PMST and WildNet searches, together with their statutory status and desktop likelihood-of-occurrence ratings, is documented in **Appendix C of Attachment 1**.

Of those species, three (3) were determined to have a plausible ecological nexus and impact pathway warranting detailed significant impact assessment, namely Marlborough Blue (*Cycas ophiolitica*), Squatter Pigeon (southern) (*Geophaps scripta scripta*), and Koala (*Phascolarctos cinereus*). Site-specific evaluations of these species are presented in **Section 5**.

4.6 Listed Migratory Species

The PMST identified twenty-nine (29) listed migratory species within the 5 km search area, while WildNet returned five migratory species records. Species strictly associated with marine, pelagic or other unsuitable habitat types have been excluded from further consideration. The inland terrestrial character of Sub-Precinct C and the absence of estuarine, tidal or coastal habitats mean no listed migratory species are expected to use the site as important lifecycle habitat.

4.7 Historical Referrals

A desktop review of historical EPBC referrals within a 5 km radius of the subject site was undertaken as part of the parent PDA-scale assessment (**Attachment 1, Section 4.7**). Eight referrals to the Commonwealth were identified, several of which considered matters directly relevant to the present site, including Marlborough Blue, Koala, Squatter Pigeon (southern), listed migratory birds and threatened ecological communities.

These referrals demonstrate that EPBC outcomes in the locality have depended on the scale of clearing, the presence of confirmed protected matters within the disturbance footprint, habitat quality and extent, and the effectiveness of avoidance and mitigation measures, rather than on locality alone. **Table C of Attachment 1** provides the full list of historical referrals and their outcomes.

5. Significant Impact Assessment

5.1 Assessment Methodology

Matters of National Environmental Significance identified in the desktop review (**Section 0**) were evaluated using habitat information, AECOM's recent ecological surveys, the confirmed Sub-Precinct C clearing layout and the *Significant Impact Guidelines 1.1* (DoE, 2013). For threatened species, a likelihood-of-occurrence assessment was used to determine which species have a reasonable potential to occur within Sub-Precinct C or rely on habitat within it; only species with a plausible ecological nexus and impact pathway are carried forward into detailed assessment.

The likelihood-of-occurrence assessment and species shortlisting were undertaken at the PDA scale in the parent assessment (**Attachment 1**). These findings are adopted here in their entirety, as the ecological character and habitat values of Sub-Precinct C are representative of the broader PDA; no species with a plausible impact pathway at the PDA scale have been excluded from consideration at the sub-precinct scale. This memo refines the assessment to the confirmed Sub-Precinct C clearing footprint, rather than repeating the full likelihood-of-occurrence assessment.

The self-assessment determines whether the proposed action is likely to have a significant impact on any MNES, and whether referral to the Commonwealth under the *EPBC Act* is recommended.

5.2 World Heritage Properties and National Heritage Places

The Great Barrier Reef World Heritage Area and National Heritage place are coastal and marine features with no spatial or functional overlap with the inland terrestrial Sub-Precinct C. No direct or functional pathway for impact on the Outstanding Universal Value, integrity or key attributes of either heritage place exists.

Development of Sub-Precinct C is therefore *unlikely* to result in a significant residual impact on World Heritage or National Heritage values.

5.3 Listed Threatened Ecological Communities

AECOM's targeted TEC assessment confirmed that neither Poplar Box Grassy Woodland on Alluvial Plains nor Weeping Myall Woodlands are present within the PDA. No *Eucalyptus populnea*-dominated canopy characteristic of Poplar Box Grassy Woodland, and no *Acacia pendula*-dominated overstorey or mapped RE 11.3.2 / RE 11.3.28 characteristic of Weeping Myall Woodlands, were recorded. Sub-Precinct C supports RE 11.3.4 and RE 11.11.15, which do not correspond to either listed TEC.

Development of Sub-Precinct C is therefore *unlikely* to result in a significant residual impact on listed threatened ecological communities.

5.4 Listed Threatened Species

Marlborough Blue (*Cycas ophiolitica*)

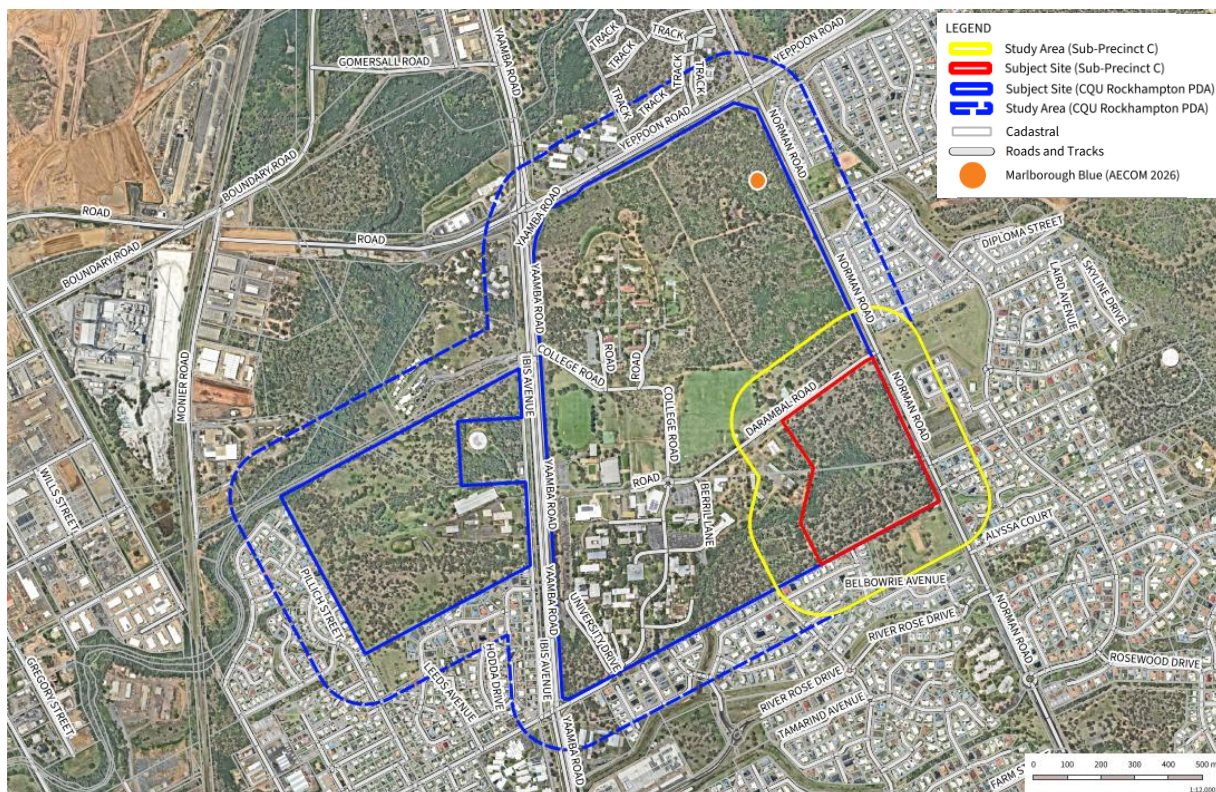
Marlborough Blue is listed as Endangered under the *EPBC Act* and is associated with rocky hills, ridges and slopes on shallow skeletal soils within dry open forests and woodlands. AECOM's Protected Plants Flora Survey confirmed two individuals on a disturbed rocky slope in the northeastern PDA (**Figure 3**), outside the Sub-Precinct C boundary and clearing footprint, and no plants were recorded within Sub-Precinct C. As a result, the proposed development of Sub-Precinct C is not expected to directly affect Marlborough Blue individuals or their characteristic habitat.

Table C - Significant Impact Assessment for Marlborough Blue

Criteria	Impact	Justification
Lead to a long-term decrease in the size of a population	Significant Impact unlikely	Confirmed Marlborough Blue individuals occur on the rocky knoll in the northeastern PDA outside the Sub-Precinct C boundary and clearing footprint; no plants are present within Sub-Precinct C. Based on available information development of the sub-precinct will not affect a <i>C. ophiolitica</i> population.
Reduce the area of occupancy of the species	Significant Impact unlikely	Sub-Precinct C does not support confirmed <i>C. ophiolitica</i> individuals or characteristic rocky slope microhabitat, and known areas of occupancy for the species occur in the Marlborough and Rockhampton rocky ranges, spatially separate from Sub-Precinct C.

Fragment an existing population into two or more populations	Significant Impact unlikely	No <i>C. ophiolitica</i> plants are present within Sub-Precinct C and the confirmed individuals are outside the clearing footprint, so there is no existing population within the sub-precinct that could be fragmented by the proposed action.
Adversely affect habitat critical to the survival of a species	Significant Impact unlikely	Sub-Precinct C does not contain the rocky slope and ridgeline habitat typically associated with Marlborough Blue, and the proposed clearing will not remove or modify habitat critical to the survival of the species at a regional scale.
Disrupt the breeding cycle of a population	Significant Impact unlikely	No individuals occur within Sub-Precinct C and no breeding focus exists in the clearing footprint, so the proposal cannot disrupt the breeding cycle of any <i>C. ophiolitica</i> population.
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	Significant Impact unlikely	Sub-Precinct C does not contain confirmed individuals or characteristically suitable rocky slope microhabitat. Clearing will not modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.
Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the critically endangered or endangered species' habitat.	Significant Impact unlikely	Marlborough Blue (<i>C. ophiolitica</i>) and its habitat are absent from Sub-Precinct C, and with standard weed-hygiene measures, development of the sub-precinct is unlikely to materially increase invasive species pressure on the species or its habitat elsewhere.
Introduce disease that may cause the species to decline.	Significant Impact unlikely	No <i>C. ophiolitica</i> populations occur within Sub-Precinct C and no <i>C. ophiolitica</i> -specific pathogens are known locally; development of the sub-precinct is therefore unlikely to introduce or spread disease to Marlborough Blue populations.
Interfere with the recovery of the species.	Significant Impact unlikely	Given <i>C. ophiolitica</i> and its key habitat are absent from Sub-Precinct C, the proposal is not expected to affect recovery actions or objectives for the species in the region.
Conclusion – Based on the above assessments, development of Sub-Precinct C is <i>unlikely</i> to result in a significant residual impact on <i>C. ophiolitica</i>.		

Figure 3 – Recorded Location of Marlborough Blue (*C. ophiolitica*) in the PDA



Squatter Pigeon (southern) (*Geophaps scripta scripta*)

Squatter Pigeon (southern) is listed as Vulnerable under the *EPBC Act* and is associated with dry, open eucalypt woodland and open forest with a grassy understorey, usually on sandy or loamy soils within dispersal distance of permanent or semi-permanent water. Within Sub-Precinct C, suitable habitat is limited to dry grassy woodland regrowth embedded in a highly modified urban-fringe matrix, lacking extensive sandy areas adjacent to permanent water; the central drainage depression conveys runoff but does not provide permanent surface water and no mapped watercourses occur in the sub-precinct. Local records confirm the species in the broader landscape, but there is no evidence of high local densities or an important population centered on Sub-Precinct C, and field surveys did not detect the species or signs of use.

Table D - Significant Impact Assessment for Squatter Pigeon (Southern)

Criteria	Impact	Justification
Lead to a long-term decrease in the size of an important population of a species	Significant Impact unlikely	Aligned habitat within Sub-Precinct C comprises dry grassy woodland regrowth embedded in a highly modified urban-fringe matrix and lacks extensive sandy areas near permanent water; records indicate the species occurs in the broader landscape, but there is no evidence of high local densities or an important population centered on Sub-Precinct C, so clearing this limited, sub-optimal habitat is unlikely to reduce the size of an important population.
Reduce the area of occupancy of an important population	Significant Impact unlikely	More extensive dry woodland and open forest occur elsewhere in the locality, including along drainage lines and within nearby conservation areas, and Sub-Precinct C represents only a modest portion of this habitat mosaic and does not support an identified important population, so its development is unlikely to materially reduce the area of occupancy of an important population.
Fragment an existing important population into two or more populations	Significant Impact unlikely	There is no evidence that Sub-Precinct C supports an important population of Squatter Pigeon (southern); the wider habitat mosaic is already fragmented by roads and development, and clearing the sub-precinct will not split a cohesive important population into separate, isolated populations.
Adversely affect habitat critical to the survival of a species	Significant Impact unlikely	Habitat within Sub-Precinct C is limited, disturbed regrowth woodland, separated from permanent water and mapped watercourses, whereas higher-value habitat occurs in larger, better-connected woodland near reliable water elsewhere; Sub-Precinct C is therefore not considered part of habitat critical to the survival of Squatter Pigeon (southern).
Disrupt the breeding cycle of an important population	Significant Impact unlikely	Squatter Pigeon (southern) nests on the ground in suitable open woodland and grassland, typically within territories that include nearby water; there is no evidence of concentrated breeding activity or dense habitat use within Sub-Precinct C, so development is unlikely to disrupt the breeding cycle of an important population.
Modify, destroy, remove, or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	Significant Impact unlikely	The proposal will remove sub-optimal regrowth woodland across the 15.74 ha sub-precinct, which is isolated from mapped watercourses and permanent surface water and already embedded in a heavily modified, weed-affected matrix; more extensive, better-connected woodland and riparian habitat remain available in the locality, so this loss is not expected to cause the species to decline at a population scale.
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat	Significant Impact unlikely	Invasive grasses and other weeds are already present in parts of Sub-Precinct C, and with standard weed-hygiene, topsoil management and rehabilitation, further spread or establishment of invasive species in retained habitat is unlikely to materially affect Squatter Pigeon (southern).
Introduce disease that may cause the species to decline	Significant Impact unlikely	Disease is not identified as a principal threat to Squatter Pigeon (southern) in the locality compared with habitat loss and degradation, and the proposed development is not expected to introduce or significantly increase disease risk when routine biosecurity measures are applied.
Interfere with the recovery of the species	Significant Impact unlikely	Recovery of Squatter Pigeon (southern) focuses on securing extensive habitat and maintaining connectivity; Sub-Precinct C provides only limited, disturbed regrowth habitat in an urban-fringe context within a part of the range where the subspecies remains comparatively common, so its development is unlikely to interfere with recovery objectives at regional or species scales.

Conclusion – Based on the above assessment, development of the Sub-Precinct C is unlikely to result in a significant residual impact on Squatter Pigeon (southern) (*G. scripta scripta*).

Koala (*Phascolarctos cinereus*)

Koala is listed as Endangered under the *EPBC Act* and occupies eucalypt forests and woodlands where preferred food trees occur in sufficient density and habitat connectivity supports home ranges and dispersal. In Sub-Precinct C, potential Koala habitat occurs as eucalypt woodland and regrowth (RE 11.11.15 and RE 11.3.4) with recognised food trees, but this habitat is limited in extent, fragmented, edge-affected and only weakly connected via sparse regrowth and interrupted riparian corridors to larger habitat blocks in the locality. AECOM's surveys did not record Koalas or definitive signs of Koala use within the PDA, and the parent assessment rated Koala as having a *Fair* likelihood of occurrence, reflecting potential but sub-optimal habitat and the absence of a resident population centered on the PDA.

Table E - Significant Impact Assessment for Koala

Criteria	Impact	Justification
Lead to a long-term decrease in the size of a population	Significant Impact unlikely	Sub-Precinct C contains potential Koala habitat in the form of eucalypt woodland and regrowth (RE 11.11.15 and RE 11.3.4) with suitable food trees, but this habitat is limited, edge-affected and broken into patches by roads and urban uses; AECOM's surveys did not record Koalas or signs within the PDA and the most recent local record dates from 2011, so development of the sub-precinct is not expected to cause a long-term decrease in the size of any Koala population.
Reduce the area of occupancy of the species	Significant Impact unlikely	Eucalypt woodlands and riparian corridors extend beyond Sub-Precinct C along Limestone Creek and Splitters Creek and into larger conservation areas and hill slopes, whereas Sub-Precinct C forms only a small, peripheral and partially isolated habitat block with sub-optimal quality; its development is therefore unlikely to materially reduce the area of occupancy of a Koala population in the regional landscape.
Fragment an existing population into two or more populations	Significant Impact unlikely	The landscape around Sub-Precinct C already includes Norman Road, Darambal Road, residential areas and campus infrastructure that constrain Koala movement, with only sparse regrowth linking northwards through the PDA and a partially interrupted Splitters Creek corridor; no resident Koala group has been identified, and Sub-Precinct C does not function as a critical link between larger habitat blocks, so further development is unlikely to fragment any existing population.
Adversely affect habitat critical to the survival of a species	Significant Impact unlikely	Critical Koala habitat is typically extensive, relatively intact eucalypt forest supporting resident populations and movement across home ranges; in contrast, habitat in Sub-Precinct C is modest in extent, fragmented, edge-affected and only indirectly connected via sparse regrowth and an interrupted riparian corridor, while larger, better-connected habitat occurs in Limestone Creek Conservation Park and Mount Archer National Park, so Sub-Precinct C is not considered habitat critical to the survival of the species.
Disrupt the breeding cycle of a population	Significant Impact unlikely	Koalas require connected habitat networks and sufficient food trees to support breeding home ranges; in Sub-Precinct C, woodland is fragmented, connectivity to larger habitat areas is limited and interrupted, and no evidence of breeding activity or a resident Koala population has been recorded, so development of the sub-precinct is unlikely to disrupt the breeding cycle of any population.
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	Significant Impact unlikely	The proposal will remove some potential Koala habitat within Sub-Precinct C, but this habitat is already constrained by roads and urban land uses and represents a small component of the available woodland and riparian habitat in the study area and locality; remnant woodland is limited and regrowth is discontinuous, degraded and not supporting a viable resident population, so the reduction in habitat extent and quality is unlikely to cause Koalas to decline at a population scale.
Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat	Significant Impact unlikely	Sub-Precinct C already supports substantial weed infestation in disturbed areas; applying standard weed-hygiene, soil management and rehabilitation will help prevent further significant spread, and development is unlikely to materially increase invasive species pressure on Koala habitat in the locality.
Introduce disease that may cause the species to decline	Significant Impact unlikely	While diseases such as chlamydia can affect Koalas, no dense Koala population is present in Sub-Precinct C and the proposed development is not expected to introduce or significantly spread Koala-specific pathogens if standard fauna-handling and biosecurity procedures are adopted.

Interfere with the recovery of the species	Significant Impact unlikely	Koala recovery emphasises protecting large, high-quality habitat and key movement corridors; Sub-Precinct C provides a small, edge-dominated, sub-optimal habitat block with limited and interrupted connectivity, and is not a focus of recovery actions, so its development is not expected to interfere with Koala recovery objectives at regional or species scales.
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Conclusion – Based on the above assessment, development of the Sub-Precinct C is *unlikely* to result in a significant residual impact on Koala (*P. cinereus*).

5.5 Listed Migratory Species

The inland terrestrial character of Sub-Precinct C, and the absence of coastal wetlands, estuaries, intertidal flats or offshore marine environments, mean the site is unlikely to support an ecologically significant proportion of any migratory species population or important lifecycle habitat. Any use of the site by listed migratory species is expected to be limited to occasional overflight or low-intensity foraging.

Development of Sub-Precinct C is therefore *unlikely* to result in a significant residual impact on listed migratory species.

5.6 EPBC Referral Advice

On the basis of the information currently available, the proposed development of Sub-Precinct C (proposed Lot 22 on SP362652, approximately 15.7 ha, fronting Norman Road, Norman Gardens) is unlikely to have a significant impact on any MNES protected under the *EPBC Act*. **As such, EPBC referral is *unlikely* to be required based on current information and the relative to the stage of development.**

This conclusion is consistent with the findings of the parent PDA-scale assessment and has been refined to reflect the confirmed Sub-Precinct C clearing footprint. It is noted that only via formal referral can an official position on the proposed activity's status under the *EPBC Act* be determined. If the proposed activity changes materially from that assessed herein, further advice should be obtained.

6. Summary and Conclusion

The provisions of the *EPBC Act* require determination of whether the proposal has, will or is likely to have a significant impact on a “matter of national environmental significance”. These matters are listed and addressed in summary as follows:

- **World Heritage Properties** – The subject site is not located within or contains a World Heritage Property, nor is the proposed development likely to affect any such area (nearest is the Great Barrier Reef, associated with the Fitzroy River corridor, several kilometres away).
- **National Heritage Places** – The subject site is not listed as or contains a National Heritage Place, nor is the proposed development likely to affect any such area.
- **Wetlands of International Importance (Ramsar)** – Ramsar wetlands do not occur within the vicinity of the subject site, nor is the proposed development likely to affect any such area.
- **Great Barrier Reef Marine Park** – The Great Barrier Reef Marine Park is not situated within the vicinity of the subject site, nor is the proposed development likely to affect any such area.
- **Commonwealth Marine Area** – The subject site is not located within or contains a Commonwealth Marine Area, nor is the proposed development likely to affect any such area.
- **Listed Threatened Ecological Communities** – Based on the assessment detailed within this report, no listed threatened ecological communities are present within the broader PDA, and no direct or indirect impacts are likely to result from the proposed development; referral based on TECs is therefore not required.
- **Listed Threatened Species** – Marlborough Blue, Squatter Pigeon (southern) and Koala were identified as having Fair or higher likelihood or confirmed presence within the subject site and were assessed using *the Significant Impact Guidelines 1.1*. These assessments concluded that the subject site is not considered to support habitat critical to the survival of these species or an important population, significant impacts are unlikely; EPBC referral on this basis is not warranted at the master planning stage.
- **Listed Migratory Species** – Desktop assessment identified multiple listed migratory species in the locality, but no “important habitat” as defined in the *Significant Impact Guidelines 1.1* was identified within the subject site or study area; any use is expected to be occasional fly-over or low-intensity foraging. Referral on the basis of migratory species is therefore not recommended.
- **Nuclear Actions** – The proposal is not a nuclear action.
- **A water resource, in relation to coal seam gas development and large coal mining development** – The proposal is not a relevant development outcome in relation to this MNES.

On the basis of this site-specific assessment, development of Sub-Precinct C is unlikely to have a significant impact on any Matters of National Environmental Significance protected under the *EPBC Act*, and **EPBC referral is unlikely to be required based on current information and the relative to the stage of development.**

With regard to the assessment undertaken it is noted that only via formal referral can an official position on the proposed activity status under the *EPBC Act* be determined. In the event that the proposed activity substantially changes from that assessed herein, it is suggested that further advice in relation to the *EPBC Act* be obtained.

Yours sincerely,



Stephen Hayes

Director of Environment/ Principal Bushfire Analyst

Therefor Group

EPBC ASSESSMENT OF SIGNIFICANCE TECHNICAL MEMO
FOR SUB-PRECINCT C

Attachment 1

EPBC Assessment of Significance Report
for CQU Rockhampton Priority Development Area (PDA) Masterplan

JULY 2026

EPBC Assessment of Significance

CQU ROCKHAMPTON PRIORITY DEVELOPMENT AREA (PDA)
MASTERPLAN, QLD 4701
FOR ECONOMIC DEVELOPMENT QUEENSLAND



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Version Control

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1. Introduction

1.1 Background

Therefor Group Pty Ltd has been engaged by Economic Development Queensland (EDQ) to prepare an Environmental Protection and Biodiversity Conservation Act (**EPBC**) Assessment of Significance (Self-Assessment) for the Central Queensland University (**CQU**) Rockhampton Priority Development Area (**PDA**) to provide advice regarding the proposed action and its likelihood to have a significant impact on Matters of National Environmental Significance (**MNES**) under the *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**). The subject site is located on Yeppoon Road, Norman Gardens QLD 4701 and encompasses Lot 1 on RP613177 and Lot 70 on SP304746, with a combined area of approximately 168.13 ha within the Rockhampton Regional Council Local Government Area (**LGA**).

1.2 Purpose of the Report

The purpose of this report is to document an EPBC significant impact self-assessment for the PDA, having regard to currently available desktop information and previous site investigations. As no detailed development layout is currently available, the assessment is undertaken at a broad PDA scale and is intended to identify the MNES most likely to be relevant to future development of the site, rather than to quantify impacts to a final disturbance footprint. At the time of writing, detailed development layouts are only available for part of the PDA in the south-eastern area (i.e. Sub Precinct C), with other parts of the PDA expected to be planned and refined over time.

This assessment has been formulated to guide the proponent in relation to obligations under *EPBC Act* administered by the Commonwealth Department of Climate Change, Energy, the Environment and Water (**DCCEEW**) and in doing so, provides an assessment of the site's ecological value and potential significant residual impacts of the development proposal on MNES pursuant to the *EPBC Act*. The report describes the ecological values identified within the subject site, based on desktop reviews of current publicly available databases and field-based information undertaken by third party consultants within the subject site. This assessment evaluates the flora and fauna species, vegetation communities, the existing condition of these communities, habitat values, and assessed areas, features, and processes of heightened ecological significance.

1.3 Assessment Overview

Environmental regulation at the federal government level is driven by the *EPBC Act*. The Act's primary purpose is to provide for the protection of the environment related to MNES including:

- World Heritage places;
- National Heritage places;
- RAMSAR wetlands (Wetlands of international importance);
- Nationally threatened species and ecological communities;
- Migratory species;
- Commonwealth marine areas;
- Nuclear actions; and
- Water resources.

Any actions likely to have a 'significant residual impact' on any of these protected matters may require that a development application be referred to the Commonwealth as part of a separate assessment process to that required under the *Planning Act 2016* (in QLD).

This report was informed by desktop review, a recent ecology technical report (**ETR**), a protected plants flora survey, and The Commonwealth Government's *EPBC Act* Protected Matters Search Tool (**PMST**). The ETR and flora survey are treated in this report as background investigations that assist with understanding site values, while the desktop review in this report independently considers whether the presently available information supports a conclusion on significant impact risk under the *EPBC Act*. While the PMST was used to identify the likely occurrence of protected matters such as potential habitats for migratory or threatened species. The results of a search of the PMST database for the subject site dated 11 June 2026 are given in **Appendix A** of this document.

Significant Impact Assessment

The DoE's *Significant Impact Guidelines 1.1* (2013) establishes 'Significant Impact Criteria' for MNES and are utilised to determine if the development is likely to result in significant residual impact to relevant matters.

1.4 Data Sources and Approaches

This assessment draws on existing, recently obtained ecological information and data for the CQU Rockhampton PDA. Key inputs include:

- AECOM's Ecology Technical Report (April 2026) for the CQU Rockhampton Priority Development Area, which documents field-validated regional ecosystems, threatened ecological communities, fauna habitats and conservation significant fauna values across the PDA. AECOM's surveys were undertaken in February 2026 over three days and included systematic vegetation mapping, fauna habitat assessment and targeted searches for conservation significant species.
- AECOM's Protected Plants Flora Survey Report (April 2026), which documents targeted searches for protected flora within mapped high-risk areas and confirms the presence of Marlborough Blue (*Cycas ophiolitica*) within the PDA.
- Commonwealth *EPBC Act* Protected Matters Search Tool (PMST) results for a 5 km buffer around the PDA generated in June 2026.
- Queensland Government datasets including WildNet conservation significant species lists, regulated vegetation and regional ecosystem mapping, and wetland and watercourse layers.
- Recent aerial imagery and topographic/LiDAR datasets used to validate land use and vegetation patterns across the PDA.

1.5 Key Definitions

The **subject site** is the entirety of the CQU PDA which encompasses the two lots, formally described as Lot 1 on RP613177 and Lot 70 on SP304746.

The **study area** is land located within approximately 150m of the footprint.

The **locality** is land within an approximate 5km radius of the subject site.

1.6 Outline of the Assessment

The assessment has been structured to provide information consistent with the requirements of the *EPBC Act 1999* and the *Significant Impact Guidelines 1.1*.

The assessment is structured as follows:

- Introduction
- Subject site environmental overview.
- Description of the development proposal.
- Desktop assessment of MNES and prior investigations
- Identification of potential impacts.
- MNES Assessment.
- Conclusion and recommendations.

1.7 Limitations

This report is intended to provide advice regarding the potential impacts to MNES relative to the proposed development for the Client and relevant stakeholders. This review and technical reporting have been informed by relevant Government databases, ecological field survey results, local experience within the area and best practice opinion and guidance provided by Therefor Group and/or government information.

No additional ecological site visit was undertaken by Therefor Group for this EPBC self-assessment. Given that AECOM's ecology and protected plant surveys, completed in late 2025 and early 2026, provide recent and comprehensive coverage of vegetation communities, threatened flora and fauna habitat and conservation values across the PDA and a 100 m buffer. These surveys were conducted in accordance with contemporary Queensland and Commonwealth ecological survey guidance, and explicitly targeted MNES where relevant. Therefor Group acknowledges the use of this data but holds no responsibility for its accuracy.

No substantial changes in land use or vegetation extent within the PDA have been identified from aerial imagery or planning information in the intervening time between AECOM survey and preparation of this assessment. Future, layout-specific approvals and pre-construction activities should revisit MNES constraints and commission targeted pre-clearance surveys where appropriate.

It is noted that only via formal referral can an official position on the proposed activity status under the EPBC Act be determined. In the event that the proposed activity substantially changes from that assessed herein, it is suggested that further advice in relation to the EPBC Act be obtained.

This report provides targeted assessment of MNES relative to the EPBC Act and does not intend to nor suggest that other State and/or local regulatory requirements are circumvented with the outcomes provided.

2. Site Analysis

2.1 Site Location and Characteristics

The subject site is located along Yeppoon Road, Norman Gardens QLD 4701, within the Rockhampton Regional Council LGA. The site comprises approximately 168.13 ha across two lots (Lot 1 on RP613177 and Lot 70 on SP304746) and is situated approximately 4 km north-east of Rockhampton CBD.

The subject site occurs in an urban fringe context associated with the university precinct, sports and recreation land, roads, disturbed land and surrounding vacant land, with surrounding residential neighbourhoods and urban development to the north, south and east, and transport and industrial land uses to the west. Previous ecological investigations describe a mosaic of remnant vegetation, regrowth vegetation and modified areas across the subject site and adjoining land.

Figure 1 provides an aerial image of the subject site in the context of the surrounding land uses and physical features.

2.2 Site Topography

The subject site is bisected by Yeppoon Road traversing in an east to west direction. The lot parcel to the west of Yeppoon Road has a general gradient of approximately 1.8° - 2.5°, rising from 24 m above sea level (ASL) at the western boundary to around 44 m ASL toward Yeppoon Road, the slope class is described as very gently inclined and consistent with the landform pattern of gently undulating rises (Speight 2009). A prominent knoll is present in the north-eastern part of this western land parcel, where the elevation rises from 30 m ASL to 63 m ASL over a run of 150 m (approx. 12.5°), before falling back to around 38 m ASL along Yeppoon Road, this slope is described as moderately inclined and conforms with the landform pattern of rolling low hills.

On the eastern side of the subject site, the land generally rises from Yeppoon Road toward Norman Road at an approximate 1.5°, from 29 m ASL to 39 m ASL. The development footprint is anticipated to be modified to achieve a slope gradient of less than 5° to support residential development.

Figure 2 displays the site's topography, as demonstrated by LiDAR-sourced topographic contours at 1m intervals and slope categorisation.

2.3 Geology and Soil

The subject site occurs within the Brigalow Belt Bioregion (Bioregion 11). Desktop interrogation of geology and soil mapping indicates that the subject site overlies a combination of Early Permian sedimentary units (Chalmers Formation (Pkc) and Lakes Creek Formation (Pkl)) and Quaternary alluvium mapped as Qa/2-Yarrol/SCAG and Qa-QLD, and a small extent of Rockhampton Group (Cr) sedimentary rocks at the western margin. These substrates correspond to land zones supporting vegetation communities and regional ecosystems on metamorphosed sediments and limited areas of alluvial woodland, consistent with RE mapping and previous studies.

2.4 Current Land Uses

The subject site is located within the Rockhampton Regional Council local government area. Under the Rockhampton Regional Council Planning Scheme, the land parcels within the subject site are zoned predominantly for community facilities and special purpose uses. Land adjoining the western, southern and eastern boundaries of the subject site consists mostly of low-density residential areas, with interspersed open space and sport and recreation land associated with nearby residential development. To the north of the subject site is a mix of community facilities, low-impact industry, emerging communities and open space. Limestone Creek Conservation Park is also located to the north of the subject site, across Yeppoon Road. The PDA therefore comprises a mosaic of remnant woodland, regrowth vegetation and highly modified land, within a broader landscape that includes larger, more continuous conservation areas such as Limestone Creek Conservation Park and Mount Archer National Park to the north.

3. Development Proposal

The proposed action involves future urban development of the PDA, including residential development and associated infrastructure. At the time of this assessment, detailed layout, servicing design, staging and disturbance footprints are only available for part of the PDA in the south-eastern area, with other parts of the PDA expected to be planned and refined over time. This report therefore assesses the proposal at a strategic level using currently available project information. The assessment identifies likely MNES constraints and potential referral triggers at PDA scale, while recognising that detailed conclusions will need to be refined once the development footprint is confirmed.

For the purposes of this EPBC assessment, it is conservatively assumed that future urban development could extend across all developable parts of the PDA, including clearing of remnant and regrowth vegetation, except where constrained by flooding, infrastructure or other statutory constraints. This assumption provides a precautionary “worst-case” basis for assessing potential significant impacts on MNES at the PDA scale.

Refer to **Figure 3** to view the Development Proposal.

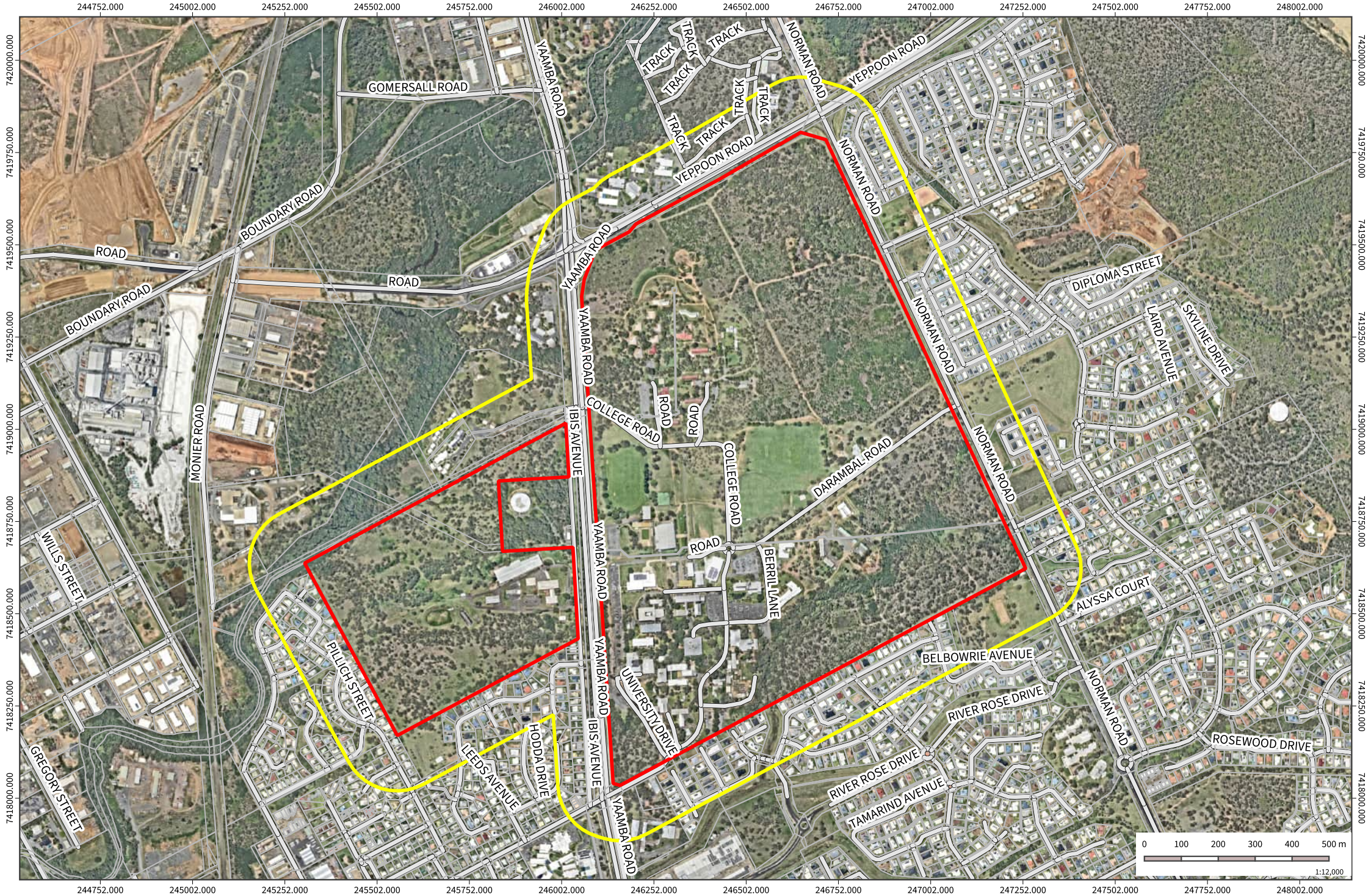
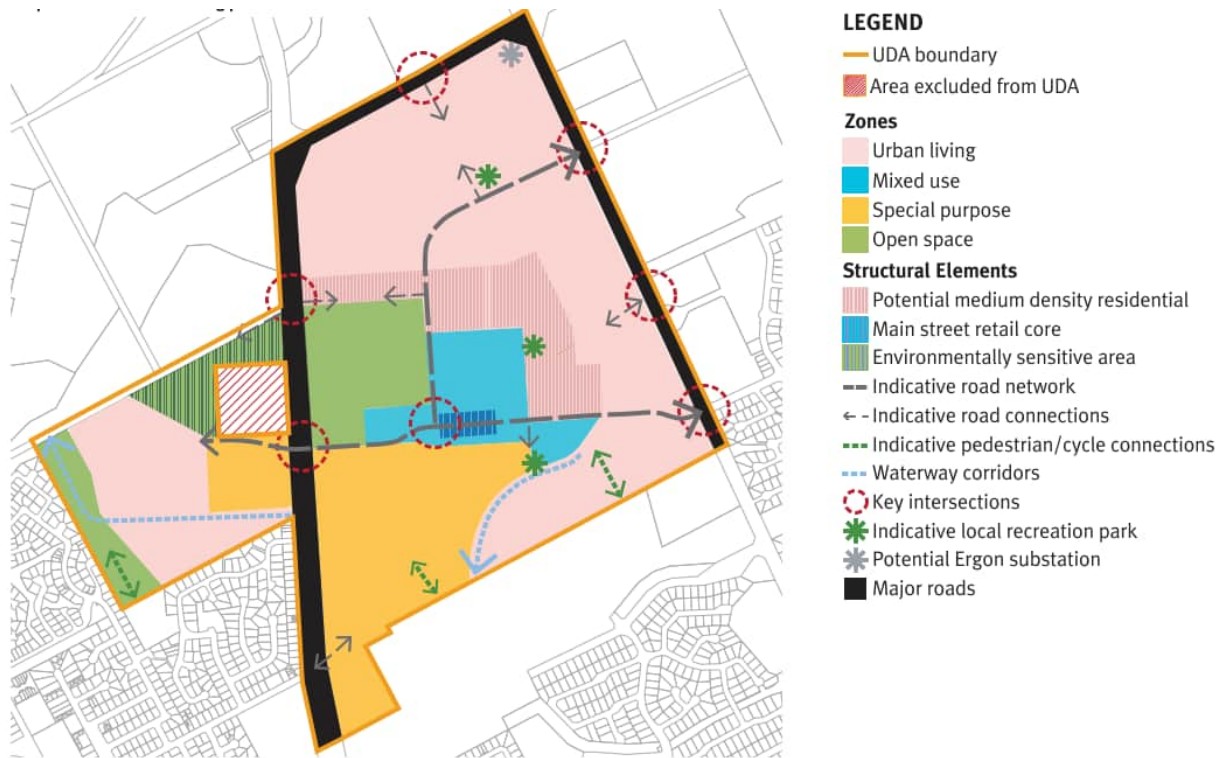




Figure 3 - Development Proposal



CQU Rockhampton Urban Development Area Development Scheme

Source: CQU Rockhampton Urban Development Area Development Scheme (April 2013) (Queensland Government 2013)

4. MNES Desktop Review

A desktop assessment of statutory requirements was conducted to identify any potential constraints and opportunities triggered by the proposed development footprint relating to the Commonwealth regulatory framework. The desktop assessment included a review of the following sources:

- Commonwealth databases and search tools;
- Prior site investigations;
- Commonwealth legislation and associated regulatory provisions;
- Mapping and aerial imagery; and
- Publicly available scientific literature.

4.1 MNES Desktop Assessment Overview

The PMST was used to identify MNES that may occur in or relate to the subject site and surrounding locality (5km buffer area). The PMST results identify one (1) World Heritage property, one (1) National Heritage place, two (2) listed threatened ecological communities, forty-nine (49) listed threatened species and twenty-nine (29) listed migratory species. These PMST outputs were cross-checked against AECOM's field-verified ecological values, WildNet records, Atlas of Living Australia records and Queensland regional ecosystem mapping to provide a consolidated list of MNES for further assessment.

Table A summarises the MNES identified by the PMST for the 5 km search area. **Appendix A** provides the full PMST Tool report for the subject site. The PMST is a screening tool only and does not confirm on-site occurrence of all returned matters; the relevance and significance of these MNES to the PDA are considered further in **Section 5**.

Table A - Matters of National Environmental Significance Results

Matter	Results
World Heritage Properties	1
National Heritage Places	1
Wetlands of International Importance (Ramsar)	0
Great Barrier Reef Marine Park	0
Commonwealth Marine Area	0
Listed Threatened Ecological Communities	2
Listed Threatened Species	49
Listed Migratory Species	29

4.2 World Heritage Properties

The PMST identifies one World Heritage property within the 5 km search area for the subject site, being the Great Barrier Reef World Heritage Area. The Great Barrier Reef World Heritage Area is mapped along the Queensland coast, approximately 23km east of the subject site, and within marine and coastal environments associated with the Fitzroy River estuary and offshore waters and does not overlap the inland terrestrial PDA.

4.3 National Heritage Places

The PMST identifies one National Heritage place within the 5 km search buffer for the subject site, being the Great Barrier Reef National Heritage place. This National Heritage listing applies to the same coastal and marine extent as the Great Barrier Reef World Heritage Area and does not overlap the inland terrestrial PDA.

4.4 Listed Threatened Ecological Communities

The PMST identified the following two (2) Threatened Ecological Communities (**TECs**) listed under the *EPBC Act* as likely to occur within the subject site's locality:

- Poplar Box Grassy Woodland on Alluvial Plains
- Weeping Myall Woodlands

A review of the DCCEEW Species Profile and Threats Database (**SPRAT**) and regional ecosystem mapping has indicated that the TECs correspond to the relevant regional ecosystem communities (in QLD) listed in **Table B** below.

Table B - Regional Ecosystems potentially containing TECs

Community	Regional Ecosystems
Poplar Box Grassy Woodland on Alluvial Plains	RE 12.3.10
Weeping Myall Woodlands	RE 11.3.2, RE 11.3.28

4.5 Listed Threatened Species

EPBC Protected Matters Search Tool

Forty-nine (49) threatened flora or fauna species were reported from the PMST results within the 5 km search area:

- Birds (18)
- Mammals (9)
- Plants (7)
- Reptiles (13)
- Sharks (2)

These threatened species include both terrestrial and marine taxa (e.g. marine mammals, marine turtles and sharks, as well as terrestrial birds, mammals, reptiles and plants). The PMST output provides a screening-level list of species that may occur in, or may relate to, the subject site and its locality; it does not confirm on-site presence.

WildNet Search

Conservation significant species recorded for the subject site and its immediate surroundings were identified from the Queensland Government's WildNet database and other desktop sources. The WildNet conservation significant species lists for the two subject lots record several EPBC-listed species within 5 km of the PDA, including:

- Birds (18)
- Mammals (3)
- Reptile (1)
- Plants (2)

The full list of EPBC-listed threatened and migratory species identified from PMST and WildNet searches, together with their statutory status and desktop likelihood-of-occurrence ratings, is compiled and tabulated in **Appendix C**. These datasets collectively inform the likelihood-of-occurrence assessment and species-specific evaluations presented in **Section 5.4**.

4.6 Listed Migratory Species

The PMST results reported twenty-nine (29) migratory species, while WildNet returned five (5) migratory species. In **Section 5.5**, these results were used to conduct likelihood of occurrence assessment and site survey to determine which species are considered to have the potential to occur within the development footprint. All other species listed in the PMST with no relevance to the subject site have been disregarded, these include species that are strictly marine or are migratory marine birds that forage and breed almost exclusively in marine habitats and may only traverse other habitats beyond marine habitats opportunistically or vagrant.

4.7 Historical Referrals

A desktop review of historical referrals within a 5 km radius of the subject site identified eight (8) referrals to the Commonwealth for assessment. Review of the referral information provided for nearby projects indicates that several of those referrals considered matters that are also relevant to the present subject site, including Koala (*Phascolarctos cinereus*), Squatter Pigeon (Southern) (*Geophaps scripta scripta*), Ornamental Snake (*Denisonia maculata*), Marlborough Blue, Black Ironbox (*Eucalyptus raveretiana*), listed migratory birds and threatened ecological communities.

Relevant examples include the Lower Fitzroy River Infrastructure Project, which proceeded as controlled actions and involved management measures such as pre-clearance surveys, offsets and species management planning for listed threatened species and ecological communities. Other nearby proposals, including the Development of Parkhurst Master Planned Community, were determined to be not controlled actions where impacts were avoided, retained habitat values were maintained, or residual impacts were not considered significant.

The historical referrals therefore demonstrate that EPBC outcomes in the locality have depended on the scale of clearing, the presence of confirmed protected matters, the quality and extent of habitat, the evaluated significant impact on the MNES values and the effectiveness of avoidance and mitigation measures, rather than on locality alone. In this context, the referrals provide useful precedent for the types of MNES likely to require consideration for the subject site, but they do not determine the referral outcome for the present proposal.

Table C reviews surrounding proposals within the locality of the subject site.

Table C – Commonwealth referrals in the vicinity of subject site

Rockhampton Ring Road	
Reference	2020/8628
LGA	Rockhampton Regional Council
Address	Rockhampton Ring Road corridor between Capricorn Highway (Yeppen) and Bruce Highway / Rockhampton–Yeppoon Road, Rockhampton Region, Queensland
Proposed Action	Construction of a highway standard ring road and associated infrastructure, including new intersections, bridges and culverts, to provide a flood-resilient sealed highway around Rockhampton.
Industry Type	Transport – Land (State Road infrastructure)
Site Area	199 ha
Disturbance Footprint	Clearing of approximately 16.5 ha of regional ecosystems and 17.3 ha of high value regrowth within the project area.
Project Status	Approved.
Environmental Protection Area	Inclusion of extensive bridging (about 6.7 km total) and no-go / rehabilitation areas to avoid and minimise impacts on mapped wetlands, Fitzroy River and associated high ecological value wetlands, and Black Ironbox / Brigalow rehabilitation areas.
Relevant Impact	TEC– Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant) ecological community Threatened Species – Black Ironbox (<i>Eucalyptus raveretiana</i>) Threatened Species – Squatter Pigeon (Southern) (<i>Geophaps scripta scripta</i>) Threatened Species – Western Alaskan Bar-tailed Godwit (<i>Limosa lapponica baueri</i>) Threatened Species – Ornamental Snake (<i>Denisonia maculata</i>) Threatened Species – Koala (<i>Phascolarctos cinereus</i>) Threatened Species – Grey Headed Flying Fox (<i>Pteropus poliocephalus</i>) Threatened Species – White-throated Needletail (<i>Hirundapus caudacutus</i>) Threatened Species – Fitzroy River Turtle (<i>Rheodytes leukops</i>) Threatened Species – Australian Painted Snipe (<i>Rostratula australis</i>) Threatened Species – Curlew Sandpiper (<i>Calidris ferruginea</i>) Threatened Species – Australian Bittern (<i>Botaurus poiciloptilus</i>) Threatened Species – White-throated Snapping Turtle (<i>Elseya albagula</i>) Migratory Species – Saltwater Crocodile (<i>Crocodylus porosus</i>)

Migratory Species – Eastern osprey (*Pandion haliaetus*), Black-tailed godwit (*Limosa limosa*), Caspian tern (*Hydroprogne caspia*), Common greenshank (*Tringa nebularia*), Common sandpiper (*Actitis hypoleucos*), Glossy ibis (*Plegadis falcinellus*), Little curlew (*Numenius minutus*), Little tern (*Sterna albifrons*), Marsh sandpiper (*Tringa stagnatilis*), Pectoral sandpiper (*Calidris melanotos*), Red-necked stint (*Calidris ruficollis*), Sharp-tailed sandpiper (*Calidris acuminata*), Wood sandpiper (*Tringa glareola*), Curlew sandpiper (*Calidris ferruginea*), Western Alaskan bar-tailed godwit (*Limosa lapponica baueri*), Latham's Snipe (*Gallinago hardwickii*)

Controlled Actions	Listed Threatened Species and Communities (Sections 18 & 18A); Listed Migratory Species (Sections 20 & 20A)
Date/Notice	16/06/2022 (Original); 24/08/2022 (Variations) The proposed action was approved under the EPBC Act, subject to conditions.

Lower Fitzroy River Infrastructure Project, Queensland	
Reference	2009/5173
LGA	Rockhampton Regional Council, Woorabinda Aboriginal Shire, Central Highland Regional Council
Address	Fitzroy River between Eden Bann Weir and the proposed Rookwood Weir site
Proposed Action	To develop a master planned community to accommodate approximately 2100 dwellings at a parcel of land located in Parkhurst, North Rockhampton.
Industry Type	Water infrastructure – weirs and associated river crossings.
Site Area	approximately 250 km of riverbed and banks, not including creeks and tributaries, in the context of over 380 km of river landscape.
Disturbance Footprint	Same as site area
Project Status	Completed
Environmental Protection Area	Retention and enhancement of dedicated biodiversity corridors (located within the ~9.15 ha non-developable balance).
Relevant Impact	TEC – Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant) ecological community Threatened Species – Black Ironbox (<i>Eucalyptus raveretiana</i>) Threatened Species – Fitzroy River Turtle (<i>Rheodytes leukops</i>) Threatened Species – Yellow Chat (<i>Epthianura crocea macgregori</i>) Threatened Species – Australian Painted Snipe (<i>Rostratula benghalensis</i>) Great Barrier Reef World Heritage Area and National Heritage Place
Controlled Actions	World Heritage values (Sections 12 & 15A); National Heritage places (Sections 15B & 15C); Listed Threatened Species and Communities (Sections 18 & 18A); Listed Migratory Species (Sections 20 & 20A)
Date/Notice	28/02/2017 The proposed action was approved under the EPBC Act, subject to conditions.

Development of Parkhurst Master Planned Community	
Reference	2012/6597
LGA	Rockhampton Regional Council
Address	William Palfrey Road, Parkhurst QLD 4701
Proposed Action	the development of a master planned community to accommodate approximately 2,100 dwellings at a parcel of land located in Parkhurst, North Rockhampton
Industry Type	Residential Development
Site Area	278 ha
Disturbance Footprint	249 ha

Project Status	Approved
Environmental Protection Area	29 ha Ramsay Creek corridor
Relevant Impact	Great Barrier Reef World Heritage Area and National Heritage Place Threatened Species – Squatter Pigeon (Southern) (<i>Geophaps scripta scripta</i>) Threatened Species – Koala (<i>Phascolarctos cinereus</i>) Threatened Species – Ornamental Snake (<i>Denisonia maculata</i>) Threatened Species – Yakka Skink (<i>Egernia rugosa</i>) Threatened Species – Fitzroy River Turtle (<i>Rheodytes leukops</i>) Migratory Species – Cattle Egret (<i>Ardea ibis</i>) Migratory Species – Rainbow Bee-eater (<i>Merops ornatus</i>)
Controlled Actions	Not a controlled action
Date/Notice	19/11/2012
Pilbeam Drive Mount Archer Natural Disaster Road Repair Works, QLD	
Reference	2015/7545
LGA	Rockhampton Regional Council
Address	Pilbeam Drive, Rockhampton
Proposed Action	The proposed works involve the repair of Pilbeam Drive, which was damaged by Tropical Cyclone Marcia (TC Marcia) in February 2014. Severe erosion and landslips have resulted in extensive damage to the road infrastructure.
Industry Type	Transport - Land
Site Area	109 ha
Disturbance Footprint	71.78 ha
Project Status	Approved
Environmental Protection Area	na
Relevant Impact	Threatened Species – Marlborough Blue (<i>Cycas ophiolitica</i>)
Controlled Actions	Not a controlled action
Date/Notice	12/02/2015
South Rockhampton Flood Levee Project, Qld	
Reference	2019/8466
LGA	Rockhampton Regional Council
Address	Approximately 127 km corridor from Gowrie (west of Toowoomba) to Kagaru (south-west of Jimboomba), QLD
Proposed Action	To construct a flood levee, spillway and pumping stations on the Fitzroy River, South Rockhampton, Queensland
Industry Type	Water Management and Use
Site Area	47.8 ha
Disturbance Footprint	47.8 ha
Project Status	Completed
Environmental Protection Area	No fixed protection area; however, all impact areas are required to be rehabilitated to natural/pre-disturbance conditions.

Relevant Impact

Great Barrier Reef World Heritage Area and National Heritage Place

Threatened Species – Squatter Pigeon (Southern) (*Geophaps scripta scripta*)

Threatened Species – Western Alaskan Bar-tailed Godwit (*Limosa lapponica baueri*)

Threatened Species – Koala (*Phascolarctos cinereus*)

Threatened Species – Ornamental Snake (*Denisonia maculata*)

Threatened Species – Australasian Bittern (*Botaurus poiciloptilus*)

Threatened Species – Australian Painted Snipe (*Rostratula australis*)

Threatened Species – Curlew sandpiper (*Calidris ferruginea*)

Migratory Birds – Black-tailed godwit (*Limosa limosa*); Caspian tern (*Hydroprogne caspia*), Common greenshank (*Tringa nebularia*), Common sandpiper (*Actitis hypoleucos*), Curlew sandpiper (*Calidris ferruginea*), Eastern osprey (*Pandion cristatus*), Glossy ibis (*Plegadis falcinellus*), Latham's snipe (*Gallinago hardwickii*), Little curlew (*Numenius minutus*), Little tern (*Sterna albifrons*), Marsh sandpiper (*Tringa stagnatilis*), Pectoral sandpiper (*Calidris melanotos*), Red-necked stint (*Calidris ruficollis*), Sharp-tailed sandpiper (*Calidris acuminata*), Western Alaskan bar-tailed godwit (*Limosa lapponica baueri*), Wood sandpiper (*Tringa glareola*)

Controlled Actions

Not controlled action

Date/Notice

30/08/2019

Cascade Valley Residential Development
Reference

2011/5832

LGA

Rockhampton Regional Council

Address

Lot 500 and Lot 6, Norman Gardens

Proposed Action

The proposed development comprises 202 small and medium sized residential Lots (ranging from 600 to 2600 m²) with all vegetation above the Reduced Level 92 metre Australian Height Datum (RL92mAHD) line retained as a single large balanced lot

Industry Type

Residential Development

Site Area

81 ha

Disturbance Footprint

51 ha

Project Status

Withdrawn

Environmental Protection Area

No fixed protection area; however, all impact areas are required to be rehabilitated to natural/pre-disturbance conditions.

Relevant Impact

Threatened Species – Marlborough Blue (*Cycas ophiolitica*)

Controlled Actions

n/a, referral was withdrawn.

Date/Notice

22/11/2012

5. Significant Impact Assessment

5.1 Assessment Methodology

The MNES identified in the desktop review (**Section 4**) were evaluated using a combination of habitat information, recent ecological surveys and the *Significant Impact Guidelines 1.1*. AECOM's Ecology Technical Report and Protected Plants Flora Survey for the CQU PDA provide verified information on vegetation communities, threatened flora, fauna habitats and conservation significant fauna across the PDA and a 100 m buffer, which was used to confirm or refine the relevance of matters identified in the PMST.

For threatened species and migratory species, a likelihood-of-occurrence assessment will be used to determine which species have a reasonable potential to occur within the PDA or rely on habitat within the PDA; only those species with a plausible ecological nexus and impact pathway are carried forward into a detailed significant impact assessment.

The following sections details the undertaking of self-assessment to determine whether or not development of the subject site, constituting an 'Action' under the *EPBC Act*, is likely to have a significant impact on any of the MNES. Self-assessment has been undertaken utilising the *Significant Impact Guidelines 1.1* criteria to determine if assessment and approval is required under the *EPBC Act*.

To assist with the interpretation of the assessment, the following key terms have been defined, according to the *EPBC Act*:

- **Action** - a project, development, undertaking, activity or an alteration to any of the previous. Actions include, but are not limited to expansion, alteration or demolition of structures, exploration, extraction, industrial processes, vegetation clearance or dealings with land.
- **Significant Impact** - an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact is dependent upon the sensitivity, value, and quality of the environment, which is impacted, and the impacts intensity, duration, magnitude and geographic extent.
- **Likely** - a significant impact is considered likely if it is a real or not remote chance or possibility. If there is scientific uncertainty about the impacts of an action and potential impacts are serious or irreversible, the precautionary principle is applicable.
- **Referral** - a referral involves a submission to the Department of the Environment, identifying the person proposing to take the action and includes a brief description of the proposal, the project location, the nature and extent of any potential impacts, and any proposed mitigation measures.

5.2 World Heritage Properties and National Heritage Places

The PMST identifies the Great Barrier Reef as both a World Heritage property and National Heritage place within the 5 km search buffer for the subject site. The CQU Rockhampton PDA is an inland terrestrial site located several kilometres from the Fitzroy River and is physically separated from the Great Barrier Reef's coastal and marine environments by extensive intervening catchment, floodplain and urban development. On available information, the proposed PDA development does not present a direct or functional pathway for impact on the Outstanding Universal Value, integrity or key attributes of the Great Barrier Reef as a World or National Heritage place, and the action is therefore considered unlikely to have a significant impact on these MNES.

5.3 Listed Threatened Ecological Communities

Threatened Ecological Communities are protected under the *EPBC Act*. A total of two (2) TECs have been identified as potentially occurring within the subject site and its surrounding. These communities correspond to particular regional ecosystem types in Queensland (i.e. RE 12.3.10 and RE 11.3.2/RE 11.3.28), which were used as a screening tool for potential TEC presence.

AECOM's field-based regional ecosystem mapping and targeted TEC assessment for the subject site did not identify any vegetation stands that meet the diagnostic characteristics and condition thresholds for these or any other EPBC-listed TECs. On this basis, no EPBC-listed threatened ecological communities are considered present within the subject site, and the proposed PDA development is not expected, on current information, to have a significant impact on TECs. The following sections detail the assessment undertaken justifying the above statement.

Poplar Box Grassy Woodland on Alluvial Plains

The Conservation Advice key diagnostics have been considered in this assessment. In relation to the described key diagnostics the following criteria could not be achieved by observed vegetation communities within the subject site.

- A tree canopy must be present that shows these features:
 - *Eucalyptus populnea* (Poplar Box) must be present in the canopy and is the dominant tree species;
 - Where hybrids of Poplar Box with other *Eucalyptus* spp. are present, they should be counted as part of the *Eucalyptus populnea* component of the tree canopy when assessing the previous criterion.

Table D – TEC Assessment Poplar Box Grassy Woodland

Criteria	Subject Site Characteristic	Conforms
A tree canopy must be present that shows these features:		
▪ <i>Eucalyptus populnea</i> (Poplar Box) must be present in the canopy and is the dominant tree species.	No <i>Eucalyptus populnea</i> in any remnant or regrowth canopy; canopy species are primarily <i>E. crebra</i> , <i>E. tereticornis</i> and <i>Corymbia dallachiana</i> , with scattered bloodwoods, and there is no evidence of Poplar Box dominance or Poplar Box hybrids within any woodland patches.	X
▪ Where hybrids of Poplar Box with other <i>Eucalyptus</i> spp. are present, they should be counted as part of the <i>Eucalyptus populnea</i> component of the tree canopy when assessing the previous criterion.		

Based on the above observations, Poplar Box Grassy Woodland on Alluvial Plains is not considered likely to occur within the subject site.

Conclusion – Having regard to the above assessment, a significant residual impact on this TEC from site development is considered unlikely.

Weeping Myall Woodland

The Conservation Advice key diagnostics have been considered in this assessment. In relation to the described key diagnostics the following criteria could not be achieved by observed vegetation communities within the subject site.

- Weeping Myall (*Acacia pendula*) as the sole or dominant overstorey species.
- Occur within two regional ecosystems namely RE 11.3.2 and RE 11.3.28.

Table E – TEC Assessment Weeping Myall Woodland

Criteria	Subject Site Characteristic	Conforms
Weeping Myall (<i>Acacia pendula</i>) is the sole or dominant overstorey species.	Field surveys recorded no Weeping Myall (<i>Acacia pendula</i>) in any canopy or mid-storey layer; overstorey trees are dominated by <i>Eucalyptus crebra</i> , <i>E. tereticornis</i> and <i>Corymbia dallachiana</i> , with only other <i>Acacia</i> spp. present in minor amounts.	X
Occur within two regional ecosystems namely RE 11.3.2 and RE 11.3.28.	Regional ecosystem mapping and ground-truthing indicate only RE 11.11.15 and RE 11.3.4 within the subject site; RE 11.3.2 and RE 11.3.28, which correspond to Weeping Myall Woodlands, are not mapped or present on site.	X

Based on the above observations, Weeping Myall Woodland is not considered likely to occur within the subject site.

Conclusion – Having regard to the above assessment, a significant residual impact on this TEC from site development is considered unlikely.

5.4 Listed Threatened Species

A detailed likelihood-of-occurrence assessment was undertaken for Critically Endangered, Endangered, Vulnerable, and Near Threatened (CEEVNT) fauna and flora species considered to potentially occupy the site. **Appendix C** provide details of the species' preferred habitats and assess the likelihood of the threatened species occupying the subject site. An indicative 1–5 scale was applied to assess the likelihood of species occurrence within suitable habitat in or near the study site (Table F).

Table F - Likelihood of Occurrence Scale

Rating	Likelihood	Description
0	Unlikely	<1% probability. No potentially suitable habitat; too disturbed; or habitat is very poor. No or few records in the region or records/site are very isolated, e.g. by pastoral land, urbanisation, etc.
1	Low	1-10% - few minor areas of potential habitat; highly modified site/habitat; or few habitat parameters present, but others absent or relatively insignificant (sub-optimum habitat). Usually, there are very few records in the locality.
2	Fair	11-25% - some significant areas of potential habitat, but some habitat parameters are limited. Potential for occasional foraging, e.g. from nearby more optimal areas or known habitats. Records at least within a 10-15km radius of the site.
3	Good	26-50% - a significant abundance of habitat parameters/habitat areas, and more locally, e.g. adjacent. Potentially part of a larger territory but is probably unable to support breeding in isolation. Recorded within 10km in similar habitats/environs.
4	Moderate	51-75% - quite good, potentially suitable habitat on and adjacent to the site, and/or good quality and abundance of some vital habitat parameters. Records within <10km, or adjacent to the site, or adjacent to the high-quality habitat where species are likely to occur.
5	High	>75% - very good to optimum habitat occurring on or adjacent to the site (support breeding pair or population). Recorded within 5-10km of the site in the same or similar habitat.
6	Confirmed	100% – Observed on the subject site.

The “Assessment of Significance” column considers the habitat on-site, the likelihood of occurrence, and the *Significant Impact Guidelines 1.1*. Recognising that some species have extensive ranges or varying tolerances to habitat modification, species assessed as having a likelihood of "Unlikely" or "Low" are excluded from detailed analysis to avoid producing superfluous information. Additionally, threatened species with strictly marine or pelagic ecology (including marine mammals, marine turtles and sharks), and migratory marine birds that rely almost entirely on offshore or coastal habitats, were excluded due to the absence of suitable habitats and plausible impact pathways within the inland terrestrial PDA.

The PMST reports 49 listed threatened species within the 5 km buffer, including birds, mammals, reptiles, plants and marine species. Desktop records from WildNet and the Atlas of Living Australia confirm the presence of several EPBC-listed species in the locality, including Marlborough Blue, Koala and Squatter Pigeon (Southern), as well as historical records of other threatened species in the broader Rockhampton region.

Threatened species with strictly marine or pelagic ecology (including marine mammals, marine turtles and sharks) and migratory marine birds that rely almost entirely on offshore or coastal habitats are considered to have no plausible impact pathway, given the inland terrestrial nature of the PDA and the absence of suitable habitat. These species are therefore not considered further in the EPBC significant impact assessment.

For remaining terrestrial threatened species, a likelihood of occurrence assessment informed by AECOM's habitat evaluations, survey findings and other available desktop information were used to identify a shortlist of species with potential to be materially affected by PDA development. Considering the “Precautionary Principle” under the *Environmental Protection Act 1994*, threatened species with a likelihood of ‘Fair’ or higher, or confirmed presence, are subject to detailed assessment. Where required, their potential impacts are evaluated using the *Significant Impact Guidelines 1.1* in a Significant Impact Assessment and included below. Species with a likelihood of "Unlikely" or "Low" are not assessed further within this report; however, the complete likelihood of occurrence assessment for all flora and fauna species is provided in **Appendix C** for reference.

Three EPBC-listed species were determined to have suitable habitat characteristics present in the subject site and a likelihood of occurrence sufficient to warrant further consideration: Marlborough Blue (confirmed present), Squatter Pigeon (southern) and Koala. These CEEVNT taxa have been assessed using the *Significant Impact Guidelines 1.1* to establish whether referral of the proposal as a controlled action is required.

Marlborough Blue (*Cycas ophiolitica*)

Marlborough Blue (*Cycas ophiolitica*) is listed as Endangered under both the *EPBC Act* and the *Nature Conservation Act 1992*. It is typically associated with rocky hills, ridges and slopes on shallow, skeletal soils within dry open forests and woodlands in central Queensland, often on metamorphic or igneous substrates and within regional ecosystems such as eucalypt woodlands on rocky rises in the Marlborough and Rockhampton districts. Within the subject site, targeted protected plant surveys recorded only two individuals in a single, localised patch on a disturbed rocky slope, surrounded by a broader matrix of regrowth, cleared land and landscaped earthworks, rather than extensive, intact rocky woodland (**Figure 4** refers).

Although these individuals occupy microhabitat broadly consistent with the species' preference for shallow, rocky soils, the surrounding vegetation and land condition differ from typical high-quality habitat (for example, the more extensive rocky woodlands and ridgelines of Mount Archer and other areas where Atlas of Living Australia records occur). Given the highly modified setting, historical clearing and evidence of past earthworks and landscaping, it is plausible that one or both individuals may have been introduced or translocated, rather than representing a remnant of a once-larger natural stand.

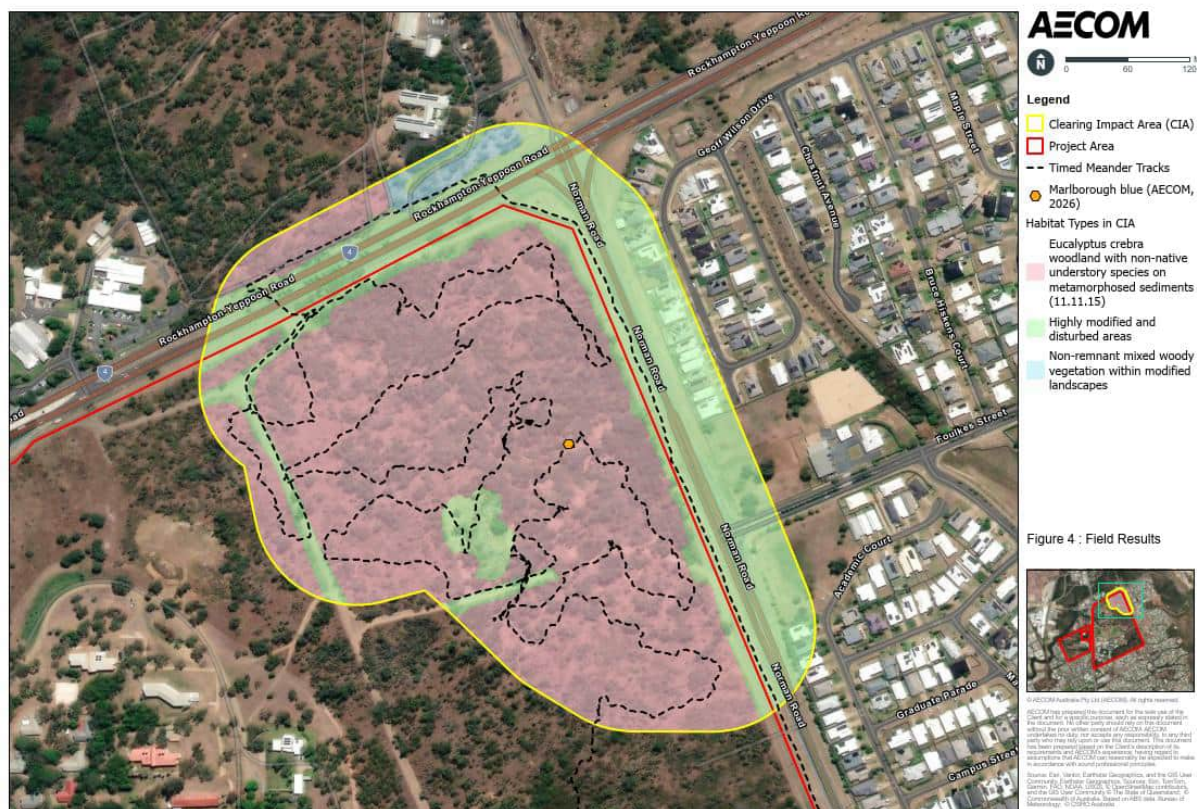
Marlborough Blue is known at some locations to occur in high local densities, forming clusters or bands of plants across suitable rocky slopes, whereas the subject site supports only two isolated individuals within a large development precinct. On this basis and having regard to the distribution of more extensive and higher quality habitat elsewhere in the region, the subject site is not considered likely to support a large, dense population of the species. An assessment of significance has nonetheless been undertaken to consider the potential impact of the proposal on these confirmed plants and their immediate habitat.

Table G - Significant Impact Assessment for Marlborough Blue

Criteria	Impact	Justification
Lead to a long-term decrease in the size of a population.	Significant Impact unlikely	The two recorded individuals occur in a single location within a highly modified landscape, rather than as part of a larger stand of cycads that would represent a population. Typical occurrences of Marlborough Blue in the region comprise numerous plants across extensive rocky hills and ridges; this pattern is not evident within the subject site. Given the small number of plants and the near-by presence of much larger and higher-quality occurrences in nearby rocky ranges (such as Mount Archer (approx. 2.5 km east) and other localities supporting multiple ALA records (approx. 2.8 km north)), loss of one or both individuals (if not avoided) would not, by itself, be expected to cause a long-term decrease in the size of a population at the regional scale.
Reduce the area of occupancy of the species.	Significant Impact unlikely	The subject site does not form part of a recognised population or core habitat area for Marlborough Blue and supports only two plants in a large, mostly cleared and regrowth landscape. These population characteristics provide no suggestion that a population is present within the study area. The species' main area of occupancy is associated with larger tracts of suitable rocky woodland elsewhere in the Marlborough and Rockhampton region, where multiple plants occur across contiguous rocky slopes. On this basis, and noting the very small number of individuals on the PDA relative to the species' broader distribution, the development is not expected, on current information, to materially reduce the area of occupancy of any Marlborough Blue.
Fragment an existing population into two or more populations.	Significant Impact unlikely	The two plants are isolated and do not comprise a continuous or extensive stand that could be fragmented by the proposed development. They are not connected to a larger contiguous population within or immediately adjacent to the subject site, so there is no existing population that could be split into separate sub-populations by site development.
Adversely affect habitat critical to the survival of a species.	Significant Impact unlikely	Preferred habitat for Marlborough Blue consists of rocky slopes and ridgelines with shallow soils in relatively intact woodland or open forest. The subject site provides only a very small area of such habitat, embedded in an otherwise disturbed and partially landscaped setting, whereas more extensive, higher-quality rocky habitats occur in nearby ranges such as Mount Archer. Clearing within the development footprint would not constitute a material impact on habitat critical to the survival of the species at a regional scale.
Disrupt the breeding cycle of a population.	Significant Impact unlikely	The presence of two (2) specimens does not constitute a population given the population dynamics of the species. Cycads have slow growth and recruitment, with dispersal largely via gravity and short-distance movement of seeds downslope, sometimes aided by animals, so local reproduction is typically concentrated where

Conclusion – Based on the above assessments, development of the subject site is unlikely to result in a significant residual impact on Marlborough Blue.

Figure 4 – Location of Recorded Marlborough Blue in AECOM’s Protected Plant Survey



Source: AECOM 2026

Squatter Pigeon (Southern) (*Geophaps scripta scripta*)

Squatter Pigeon (southern) is listed as Vulnerable under both the *EPBC Act* and the *Nature Conservation Act 1992* and is associated with dry, open eucalypt woodland and open forest with a grassy understorey, usually on sandy or loamy soils within dispersal distance of permanent or semi-permanent water. Within the subject site, ground-truthed regional ecosystems RE 11.11.15 and RE 11.3.4 provide dry grassy woodland and open forest, but these occur as relatively small, fragmented patches embedded in a matrix of regrowth, cleared areas and urban-fringe disturbance, and permanent water is limited to artificial or highly modified features.

Records from the locality include one WildNet observation within the eastern part of the subject site and Atlas of Living Australia records within approximately 5 km, indicating that Squatter Pigeon (southern) occurs in the broader landscape. However, there is no evidence of high local densities or repeated records concentrated within or immediately around the subject site, and AECOM's surveys did not detect the species nor evidence of the species utilising site resources. Given the limited extent and fragmented nature of aligned habitat on the subject site, and the availability of more extensive, better-connected woodland and water-proximate habitat in the locality, the subject site is more likely to function as secondary foraging and movement habitat rather than critical habitat or the core of an important population. An assessment of significance has been undertaken on this basis.

Table H - Significant Impact Assessment for Squatter Pigeon (Southern)

Criteria	Impact	Justification
Lead to a long-term decrease in the size of an important population of a species.	Significant Impact unlikely	Aligned habitat on the subject site is confined to limited areas of RE 11.11.15 and RE 11.3.4 dry grassy woodland and open forest, which are fragmented by existing infrastructure, historical clearing and lack extensive sandy areas close to permanent water that characterise the highest-value habitat for Squatter Pigeon (southern). Records in the locality indicate potential presence, but there is no evidence of high local densities or repeated observations that would identify an important population centred on the subject site; instead, birds are likely to use the subject site intermittently as part of larger home ranges anchored in more extensive habitat elsewhere. Removing the relatively small area of aligned habitat within the subject site is therefore unlikely to cause a long-term decrease in the size of an important population.
Reduce the area of occupancy of an important population.	Significant Impact unlikely	Within the locality, dry woodland and open forest occur in larger, more continuous tracts than those on the subject site, including along drainage lines and in nearby conservation areas, providing more suitable and extensive habitat for Squatter Pigeon (southern). The subject site represents only a modest portion of this broader habitat mosaic and is not identified as a focal area for the species nor does the site support an important population. On this basis, development of the subject site is unlikely to materially reduce the area of occupancy of an important population in the regional landscape.
Fragment an existing important population into two or more populations.	Significant Impact unlikely	There is no evidence to suggest the site supports an important population and as such site development will not fragment an important population based on current information. The habitat mosaic across the locality already includes substantial fragmentation from roads, urban development and cleared land, and the subject site's woodland patches are not part of an unbroken, high-quality corridor that would support a cohesive, important population of Squatter Pigeon (southern). Additional fragmentation caused by development of the subject site is therefore unlikely to split an existing important population into separate, isolated populations, particularly as other woodland and riparian habitats remain available in the study area and locality.
Adversely affect habitat critical to the survival of a species.	Significant Impact unlikely	Critical habitat for Squatter Pigeon (southern) is typically associated with extensive areas of dry, grassy woodland or open forest in proximity to reliable water, supporting breeding and foraging at meaningful densities. On the subject site, woodland is limited in extent, surrounded by disturbance and largely separated from reliable natural water sources, whereas the locality supports larger and more continuous habitat blocks in less disturbed settings. The subject site is therefore not considered to form part of habitat critical to the survival of the species, and its development is unlikely to materially affect such habitat.

Disrupt the breeding cycle of an important population.	Significant Impact unlikely	Squatter Pigeon (southern) nests on the ground in suitable open woodland and grassland, often within territories that include access to nearby water and multiple foraging patches. There is no evidence of concentrated breeding activity on the subject site (e.g. repeated observations or dense use of habitat patches), and the limited extent and disturbed condition of aligned habitat makes it unlikely to support the core breeding area of an important population. Development of the subject site is therefore unlikely to disrupt the breeding cycle of an important population.
Modify, destroy, remove, or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.	Significant Impact unlikely	The proposal will remove a limited extent of aligned woodland habitat on the subject site, however, this habitat is present in a fragmented and weed infested and disturbed context, and additionally, represents a small fraction of the woodland available in the study area and locality. Consequently, the net reduction in habitat extent and quality is not expected, on current information, to be sufficient to cause a decline in Squatter Pigeon (southern) at the population scale.
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat.	Significant Impact unlikely	Invasive grasses and other weeds are already established in parts of the subject site, reflecting long-standing disturbance of the woodland ground layer. Implementing standard weed-hygiene protocols, topsoil management and post-construction rehabilitation will help prevent further significant spread or establishment of invasive species in retained woodland habitat. As a result, the development is unlikely to result in invasive species pressure that would materially affect Squatter Pigeon (southern).
Introduce disease that may cause the species to decline.	Significant Impact unlikely	Disease has not been identified as a principal threat to Squatter Pigeon (southern) in the locality compared with habitat loss and degradation, and the proposed development is not expected, on current information, to introduce novel diseases or significantly increase disease risk, particularly with routine biosecurity measures. Disease-related impacts are therefore considered unlikely.
Interfere with the recovery of the species.	Significant Impact unlikely	Recovery of Squatter Pigeon (southern) emphasises securing extensive habitat, maintaining landscape connectivity and reducing key threats such as broad-scale clearing and grazing pressure. The subject site provides limited, already fragmented habitat in an urban-fringe setting, and its development is not expected, on current information, to interfere with recovery efforts at regional or species scales.
Conclusion – Based on the above assessment, development of the subject site is unlikely to result in a significant residual impact on Squatter Pigeon (southern).		

Koala (*Phascolarctos cinereus*)

Koala (*Phascolarctos cinereus*) is listed as Endangered under both the *EPBC Act* and the *Nature Conservation Act 1992*. Koalas occupy eucalypt forests and woodlands where preferred food trees occur in sufficient density and where habitat is connected enough to support home ranges and dispersal. Within the subject site, eucalypt woodland and open forest associated with regional ecosystems RE 11.11.15 and RE 11.3.4 provide potential Koala habitat, with canopies dominated by *Eucalyptus crebra*, *Eucalyptus tereticornis* and *Corymbia* species that include recognised food trees. Remnant vegetation is restricted to relatively small patches, while regrowth vegetation is more scattered, occurs in smaller blocks and does not form an obvious continuous canopy across the subject site. However, this habitat occurs as discrete patches embedded in a highly modified, urban-fringe setting, bounded on multiple sides by major roads, residential development and campus infrastructure, and intersected by internal roads and cleared areas.

Koalas have been recorded in the locality, including a record within 1 km in 2011, confirming that Koalas have historically utilised the broader landscape, rather than recently. The subject site has some connectivity to higher-quality habitat to the north through the riparian corridor of Limestone Creek Conservation Park, but there are no obvious continuous corridors linking the subject site east, south or west to other large habitat blocks due to the intervening urban development and major road network. Field surveys did not confirm resident Koalas in the subject site or study area (no scats or definitive claw marks), and the likelihood of occurrence assessment therefore rated Koala as Fair within the subject site, reflecting potential habitat and nearby records but an absence of clear evidence for a resident population centred on the subject site.

Table I - Significant Impact Assessment for Koala

Criteria	Impact	Justification
Lead to a long-term decrease in the size of a population of a species.	Significant Impact unlikely	The subject site contains potential Koala habitat in the form of eucalypt woodland and regrowth (RE 11.11.15 and RE 11.3.4) with suitable food trees, but this habitat is limited in extent and broken into patches by internal roads, cleared land and

buildings. The site is also bounded by major roads and urban development on several sides, meaning Koala use is likely to be limited to occasional foraging or movement rather than supporting a dense, resident group. Habitat suitability mapping and transect surveys conducted by AECOM did not record Koalas or signs such as scats or claw marks within the PDA, and the most recent Koala record in the locality dates from 2011, indicating that the subject site is not currently supporting a discrete population. In addition, habitat within the PDA is degraded and dominated by regrowth and dense ground cover that is sub-optimal for Koala movement, and historical records and anecdotal evidence also suggest that Koala populations were regionally decimated in the early 1900's and the species has not had opportunity to recover. In this context, development of the subject site is not expected, on current information, to lead to a long-term decrease in the size of any Koala population.

Reduce the area of occupancy of an population.	Significant Impact unlikely	Within the study area and locality, eucalypt woodlands and riparian corridors extend beyond the subject site, particularly along Limestone Creek and towards larger conservation areas and wooded hill slopes. The subject site occupies only a portion of this habitat network and functions as a peripheral, partially isolated block due to surrounding roads and urban land uses. AECOM's habitat assessment and field surveys did not identify a resident Koala group within the PDA, and habitat quality on site is sub-optimal relative to nearby, more intact woodland and riparian corridors. On this basis, the subject site is unlikely to form a core area of occupancy for a Koala population, and its development is not expected, on current information, to materially reduce the area of occupancy of such a population in the regional landscape.
Fragment an existing population into two or more populations.	Significant Impact unlikely	The current landscape already includes major roads (e.g. Yeppoon Road and Norman Road), residential areas and campus fencing that constrain Koala movement and limit continuous habitat connectivity across the subject site. The principal remaining corridor connection is northwards along Limestone Creek and associated conservation land, rather than multi-directional linkages to the east, south and west. AECOM's surveys did not identify a resident Koala group on the PDA, and the subject site does not function as a critical link joining two larger Koala habitat blocks. Further development within the subject site is therefore unlikely to fragment any existing population into separate, isolated populations, or fragment known habitat corridors.
Adversely affect habitat critical to the survival of a species.	Significant Impact unlikely	Critical Koala habitat is typically characterised by extensive areas of preferred eucalypt species in relatively intact landscapes that support resident populations and allow movement across home ranges. Although the subject site includes potential Koala habitat, its extent is modest, the woodland is fragmented, and the area is heavily influenced by adjacent roads, residential development and campus infrastructure, with only one substantial corridor connection towards Limestone Creek Conservation Park. By contrast, the locality supports larger and more continuous habitat blocks in less disturbed settings, particularly in mapped statewide biodiversity corridors and in the Berserker Range/Mount Archer area. The site lacks key features such as connectivity, evidence of use, and has various degrading processes reducing habitat value, and is therefore not considered to form habitat critical to the survival of Koalas at a regional scale.
Disrupt the breeding cycle of a population.	Significant Impact unlikely	Koalas require connected habitat networks and sufficient densities of suitable food trees to support breeding home ranges. The fragmented nature of woodland in the subject site, the strong edge effects from surrounding roads and urban land uses, and the absence of confirmed resident Koalas or repeated signs of breeding activity mean the PDA is unlikely to support the core breeding area of any population. There is no evidence of breeding activity or a breeding population on-site, and development of the subject site is therefore unlikely to disrupt the breeding cycle of any Koala population.
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.	Significant Impact unlikely	The proposal will remove some potential Koala habitat within the subject site, but this habitat is already constrained by surrounding roads and urban uses and forms a small part of the available woodland and riparian habitat in the study area and locality. Within the PDA, remnant woodland is limited in extent, and regrowth vegetation is dispersed in small, discontinuous patches that do not form continuous canopy, further limiting the site's capacity to support a substantial resident Koala population. The habitat is degraded and unlikely to be supporting a viable population, and AECOM's surveys found no evidence of Koala use. The reduction in habitat extent

		and quality is not expected, on current information, to be large enough to cause Koalas to decline at the population scale.
Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat.	Significant Impact unlikely	The subject site already supports substantial weed infestations in both understorey and riparian areas, reflecting long-term disturbance. Construction and operation of the development will include weed-hygiene measures, soil management and post-construction rehabilitation, which will help prevent further significant spread of invasive species in retained woodland and riparian habitat used by Koalas in the study area and locality. This impact pathway is therefore unlikely to be significant.
Introduce disease that may cause the species to decline.	Significant Impact unlikely	While diseases such as chlamydia can affect Koala populations, there is no evidence that the subject site currently supports a dense Koala population or that the proposed development would introduce or significantly spread Koala-specific pathogens, provided standard fauna-handling and biosecurity procedures are adopted during clearing. Disease-related impacts are therefore considered unlikely.
Interfere with the recovery of the species.	Significant Impact unlikely	Koala recovery efforts focus on protecting large, high-quality habitat areas, maintaining key movement corridors, and addressing threats in areas of high Koala density. The subject site represents a relatively small, edge-dominated habitat block in an urban-fringe setting, with limited multi-directional connectivity and only one substantial corridor connection to Limestone Creek Conservation Park. The habitat on site is not suitable to support recovery efforts for the Koala. The development of the subject site is not expected, on current information, to interfere with Koala recovery objectives at regional or species scales.
Conclusion – Based on the above assessment, development of the subject site is unlikely to result in a significant residual impact on Koala.		

5.5 Listed Migratory Species

The *Significant Impact Guidelines 1.1* consider an impact on migratory species to be significant if there is a real chance or possibility that an action is likely to substantially modify an area of important habitat, result in the establishment of a harmful invasive species or cause serious disruption to the lifecycle of a population or an area of important habitat. In accordance with the Guidelines, an area of 'important habitat' for a migratory species is:

- habitat utilised by a migratory species occasionally or periodically within a region that supports an ecologically significant proportion of the population of the species, and/or
- habitat that is of critical importance to the species at life-cycle stages, and habitat utilised by a migratory species which is at the limit of the species range, and/or
- habitat within an area where the species is declining.

The PMST identified 29 listed migratory species within a 5 km buffer around the subject site, predominantly migratory shorebirds and other waterbirds, along with a small number of marine species. Most of these species depend primarily on coastal wetlands, estuaries, intertidal flats or offshore marine environments, which are absent from the subject site; the subject site and study area also lack mapped high ecological value wetlands or other features typically associated with important migratory bird habitat.

Migratory species that are strictly marine, or that forage and breed almost exclusively in marine or coastal habitats and may only traverse inland habitats opportunistically or as vagrants, are therefore considered to have no realistic impact pathway in relation to development of the subject site, given its inland terrestrial setting. Remaining terrestrial and freshwater migratory species were considered in the likelihood of occurrence assessment, which found that the subject site and study area are unlikely to support an ecologically significant proportion of any migratory species' population or any habitat of critical lifecycle importance; any use is expected to be occasional overflight or low-intensity foraging that does not rely on habitat features unique to the subject site.

Conclusion – On this basis, and given the absence of identified “important habitat” for migratory species within the subject site as defined in the *Significant Impact Guidelines 1.1*, development of the subject site is not considered likely to result in a significant residual impact on listed migratory species, and a detailed species-specific significant impact assessment is not required.

5.6 EPBC Referral Advice

Considering the desktop screening for MNES, recent ecological and protected plant surveys, the inland terrestrial context of the subject site, and a precautionary assumption that developable parts of the subject site may be cleared for urban development. On the basis of the information currently available, the proposed action is not considered likely to have a significant impact on any MNES protected under the *EPBC Act*. The likelihood of occurrence and significant impact assessments indicate that no EPBC-listed threatened ecological communities are present, only two individuals of an EPBC-listed flora species, Marlborough Blue, occur in a small, disturbed rocky patch, and the subject site supports limited, fragmented habitat for threatened fauna such as Squatter Pigeon (southern) and Koala compared with larger, higher-value habitats in adjacent conservation lands and other parts of the locality.

Important habitat for listed migratory species, as defined in the *Significant Impact Guidelines 1.1*, is also not present within the subject site or study area, noting the absence of coastal wetlands, estuaries, intertidal flats or offshore marine environments and the expectation that any use by migratory birds would be limited to occasional overflight or low-intensity foraging that does not depend on habitat unique to the subject site.

On this basis, and as a result of the outcomes of this assessment, based on the information available, significant impacts on MNES have not been identified that would warrant a recommendation for referral of the action under the EPBC Act.

However, it is re-iterated that only a formal referral and decision by DCCEEW can provide a binding determination, and any future, layout-specific development proposals should be re-assessed against MNES risks as designs are refined and additional ecological information becomes available.

6. Summary & Recommendations

6.1 Summary of Matters of National Environmental Significance

The provisions of the *EPBC Act* require determination of whether the proposal has, will or is likely to have a significant impact on a “matter of national environmental significance”. These matters are listed and addressed in summary as follows:

- **World Heritage Properties** – The subject site is not located within or contains a World Heritage Property, nor is the proposed development likely to affect any such area (nearest is the Great Barrier Reef, associated with the Fitzroy River corridor, several kilometres away).
- **National Heritage Places** – The subject site is not listed as or contains a National Heritage Place, nor is the proposed development likely to affect any such area.
- **Wetlands of International Importance (Ramsar)** – Ramsar wetlands do not occur within the vicinity of the subject site, nor is the proposed development likely to affect any such area.
- **Great Barrier Reef Marine Park** – The Great Barrier Reef Marine Park is not situated within the vicinity of the subject site, nor is the proposed development likely to affect any such area.
- **Commonwealth Marine Area** – The subject site is not located within or contains a Commonwealth Marine Area, nor is the proposed development likely to affect any such area.
- **Listed Threatened Ecological Communities** – Based on the assessment detailed within this report, no listed threatened ecological communities are present within the study area, and no direct or indirect impacts are likely to result from the proposed development; referral based on TECs is therefore not required.
- **Listed Threatened Species** – Marlborough Blue, Squatter Pigeon (southern) and Koala were identified as having Fair or higher likelihood or confirmed presence within the subject site and were assessed using *the Significant Impact Guidelines 1.1*. These assessments concluded that the subject site is not considered to support habitat critical to the survival of these species or an important population, significant impacts are unlikely; EPBC referral on this basis is not warranted at the master planning stage.
- **Listed Migratory Species** – Desktop assessment identified multiple listed migratory species in the locality, but no “important habitat” as defined in the *Significant Impact Guidelines 1.1* was identified within the subject site or study area; any use is expected to be occasional fly-over or low-intensity foraging. Referral on the basis of migratory species is therefore not recommended.
- **Nuclear Actions** – The proposal is not a nuclear action.
- **A water resource, in relation to coal seam gas development and large coal mining development** – The proposal is not a relevant development outcome in relation to this MNES.

6.2 Recommendations to Avoid and Minimise Impacts on EPBC-listed Species (future development within the PDA)

As this EPBC assessment has been undertaken at a broad PDA scale and detailed layouts are currently only available for part of the subject site in the south-eastern PDA (i.e. Sub Precinct C), the following high-level recommendations are provided as guidance for any future development across the remainder of the PDA. They are intended to help inform and refine future masterplanning and design, by further supporting better biodiversity outcomes for the PDA as a whole over time. These recommendations are not presented as mitigation measures necessary to address a significant impact, as on present information no significant impacts on MNES have been identified for the assessed development, but rather as good-practice considerations to support ongoing design and planning elsewhere in the PDA.

Retain higher-quality woodland and connectivity to Limestone Creek

- Prioritise retention of remnant and higher-condition RE 11.11.15 and RE 11.3.4 patches in the northern part of the subject site that maintain connectivity with Limestone Creek Conservation Park and associated riparian corridors.

- Integrate these patches into the PDA green space and open-space network as habitat corridors for Koala and Squatter Pigeon (southern), rather than fully clearing them.

In-situ protection of Marlborough Blue with buffers (and translocation contingency)

- Retain the two confirmed Marlborough Blue plants in situ, with an appropriate protection buffer (e.g. fenced no-go zone, avoiding cut-and-fill) and incorporate this microhabitat into the masterplan's open space or conservation areas.
- If subsequent detailed design demonstrates that in-situ protection cannot reasonably be achieved, prepare a species-specific translocation plan (including seed collection/propagation and post-translocation monitoring) to suitable rocky woodland habitat in the locality, in consultation with regulators. Any Marlborough Blue translocation would need to comply with NC Act protected plants requirements and be supported by an appropriately qualified botanist.

Preserve and enhance riparian habitats and the minor southern waterway

- Maintain vegetated buffers along Limestone Creek and the minor drainage line in the southern part of the subject site, avoiding channelisation or hard-edge development wherever practicable.
- Use weed management and native revegetation to improve habitat quality and maintain movement opportunities for Koala and ground-foraging birds such as Squatter Pigeon (southern).

Apply Koala-sensitive design and clearing practices

- Implement Koala-sensitive clearing (staged tree felling, daylight clearing, use of fauna spotter-catchers) to manage any individual Koalas that may occasionally use the subject site.
- In landscape design, retain and plant suitable eucalypt food trees within key corridors, while avoiding creating isolated "traps" of habitat adjacent to high-risk road interfaces.

Manage woodland structure and ground layer for Squatter Pigeon (southern)

- In retained woodland/open space, manage mowing and ground-layer vegetation to favour a structurally diverse grassy understorey and avoid dominance by tall exotic pasture that may reduce foraging value.
- Concentrate paths and active recreation areas in already disturbed zones to limit disturbance within retained habitat patches.

In general, it is also recommended that a pre-clearance survey be carried out once a detailed layout is available to re-validate LoO at the footprint scale.

With regard to the assessment undertaken it is noted that only via formal referral can an official position on the proposed activity status under the *EPBC Act* be determined. In the event that the proposed activity substantially changes from that assessed herein, it is suggested that further advice in relation to the *EPBC Act* be obtained.

Yours sincerely,

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Reviewer:



Steve Hayes

BSc(Env) Hons GradCertBfireProt ESA MEIANZ
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7. References

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EPBC ASSESSMENT OF SIGNIFICANCE

Appendix A

EPBC PROTECTED MATTERS SEARCH TOOL



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: 11-Jun-2026

[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:	1
National Heritage Places:	1
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	2
Listed Threatened Species:	49
Listed Migratory Species:	29

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:	12
Commonwealth Heritage Places:	1
Listed Marine Species:	33
Whales and Other Cetaceans:	2
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:	2
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	8
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

World Heritage Properties			[Resource Information]
Name	State	Legal Status	Buffer Status
Great Barrier Reef	QLD	Declared property	In buffer area only

National Heritage Places			[Resource Information]
Name	State	Legal Status	Buffer Status
Natural			
Great Barrier Reef	QLD	Listed place	In buffer area only

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
Poplar Box Grassy Woodland on Alluvial Plains	Endangered	Community likely to occur within area	In feature area
Weeping Myall Woodlands	Endangered	Community likely to occur within area	In feature 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			
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Epthianura crocea macgregori Capricorn Yellow Chat, Yellow Chat (Dawson) [67090]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Erythrotriorchis radiatus Red Goshawk [942]	Endangered	Species or species habitat likely 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
Geophaps scripta scripta Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Neochmia ruficauda ruficauda Star Finch (eastern), Star Finch (southern) [26027]	Endangered	Species or species habitat likely to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Poephila cincta cincta Southern Black-throated Finch [64447]	Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area
Turnix melanogaster Black-breasted Button-quail [923]	Vulnerable	Species or species habitat likely to occur within area	In feature area
MAMMAL			
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Endangered	Species or species habitat may occur within area	In feature area
Dasyurus hallucatus Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu] [331]	Endangered	Species or species habitat likely to occur within area	In feature area
Macroderma gigas Ghost Bat [174]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Orcaella heinsohni Australian Snubfin Dolphin [81322]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Petauroides volans Greater Glider (southern and central) [254]	Endangered	Species or species habitat likely to occur within area	In feature area
Petaurus australis australis Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat may occur within area	In buffer area only
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 likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour may occur within area	In feature area
Sousa sahalensis Australian Humpback Dolphin [87942]	Vulnerable	Species or species habitat may occur within area	In buffer area only
PLANT			
Cupaniopsis shirleyana Wedge-leaf Tuckeroo [3205]	Vulnerable	Species or species habitat may occur within area	In feature area
Cycas ophiolitica [55797]	Endangered	Species or species habitat likely to occur within area	In feature area
Dichanthium setosum bluegrass [14159]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Eucalyptus raveretiana Black Ironbox [16344]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Leichhardtia brevifolia listed as Marsdenia brevifolia [91893]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pimelea leptospermoides [20849]	Vulnerable	Species or species habitat may occur within area	In feature area
Samadera bidwillii Quassia [29708]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Breeding likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Delma torquata Adorned Delma, Collared Delma [1656]	Vulnerable	Species or species habitat may occur within area	In feature area
Denisonia maculata Ornamental Snake [1193]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Egernia rugosa Yakka Skink [1420]	Vulnerable	Species or species habitat may occur within area	In feature area
Elseya albagula Southern Snapping Turtle, White-throated Snapping Turtle [81648]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Furina dunmalli Dunmall's Snake [59254]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Hemiaspis damelii Grey Snake [1179]	Endangered	Species or species habitat likely to occur within area	In feature area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Breeding likely to occur within area	In buffer area only
Rheodytes leukops Fitzroy River Turtle, Fitzroy Tortoise, Fitzroy Turtle, White-eyed River Diver [1761]	Endangered	Species or species habitat likely to occur within area	In feature area
SHARK			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pristis zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Breeding may occur within area	In buffer area only
Sphyrna lewini Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat likely to 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
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat may occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Migratory Marine Species			
Anoxypristis cuspidata Narrow Sawfish, Knifetooth Sawfish [68448]		Species or species habitat likely to occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Breeding likely to occur within area	In buffer area only
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat may occur within area	In buffer area only
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Breeding likely to occur within area	In buffer area only
Orcaella heinsohni Australian Snubfin Dolphin [81322]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pristis zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Breeding may occur within area	In buffer area only
Sousa sahalensis as Sousa chinensis Australian Humpback Dolphin [87942]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Terrestrial Species			
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Migratory Wetlands Species			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat likely to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	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
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	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
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands		[Resource Information]
The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.		
Commonwealth Land Name	State	Buffer Status
Australian Postal Corporation		

Commonwealth Land Name	State	Buffer Status
Lot 1 RP605997 [AGPR7294]	QLD	In buffer area only
Department of Climate Change, Energy, the Environment and Water		
ABC Radio Studios [CHL_105420]	QLD	In buffer area only
Department of Defence		
AAFC 227 Squadron - Rockhampton [DD_0338]	QLD	In buffer area only
Frenchville Rifle Range [DD_0215]	QLD	In buffer area only
Frenchville Rifle Range (Buffer) [AGPR978]	QLD	In buffer area only
Logistic Support Depot Rockhampton [AGPR1591]	QLD	In buffer area only
Logistic Support Depot Rockhampton [AGPR2797]	QLD	In buffer area only
Logistic Support Depot Rockhampton [AGPR1590]	QLD	In buffer area only
Rockhampton Airfield [DD_1354]	QLD	In buffer area only
Staging and Support Base - Rockhampton [DD_0213]	QLD	In buffer area only
Department of Veterans' Affairs		
Lot 33 RP605961 [AGPR6259]	QLD	In buffer area only
Lot 91 on RP604171 [AGPR6267]	QLD	In buffer area only

Commonwealth Heritage Places			[Resource Information]
Name	State	Status	Buffer Status
Historic			
ABC Radio Studios	QLD	Listed place	In buffer area only

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat likely to occur within area	In feature area
Anseranas semipalmata			
Magpie Goose [978]		Species or species habitat may occur within area overfly marine area	In feature area
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
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 likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to 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
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat may occur within area	In buffer area only
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	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 overfly marine area	In feature area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
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 likely to occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat likely to occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	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
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In buffer area only
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 likely 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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Symposiachrus trivirgatus as Monarcha trivirgatus			
Spectacled Monarch [83946]		Species or species habitat likely to occur within area overfly marine area	In feature area
Thalassarche impavida			
Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Tringa nebularia			
Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Reptile			
Caretta caretta			
Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Chelonia mydas			
Green Turtle [1765]	Vulnerable	Breeding likely to occur within area	In buffer area only
Crocodylus porosus			
Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area	In feature area
Dermochelys coriacea			
Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Eretmochelys imbricata			
Hawksbill Turtle [1766]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Lepidochelys olivacea			
Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Natator depressus			
Flatback Turtle [59257]	Vulnerable	Breeding likely to occur within area	In buffer area only
Whales and Other Cetaceans			[Resource Information]
Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			

Current Scientific Name	Status	Type of Presence	Buffer Status
Orcaella heinsohni	Vulnerable	Species or species habitat may occur within area	In buffer area only
Australian Snubfin Dolphin [81322]			
Sousa sahalensis	Vulnerable	Species or species habitat may occur within area	In buffer area only
Australian Humpback Dolphin [87942]			

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Limestone Creek	Conservation Park	QLD	In feature area
Mount Archer	National Park	QLD	In buffer area only

EPBC Act Referrals					[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status	
Rockhampton Ring Road	2020/8628		Post-Approval	In feature area	

Controlled action				
Lower Fitzroy River Infrastructure Project	2009/5173	Controlled Action	Post-Approval	In buffer area only
Talisman Saber 2005 Military Exercise	2004/1819	Controlled Action	Post-Approval	In buffer area only

Not controlled action				
Development of Parkhurst Master Planned Community	2012/6597	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
Pilbean Drive Mount Archer natural disaster road repair works, QLD	2015/7545	Not Controlled Action	Completed	In buffer area only
South Rockhampton Flood Levee Project, Qld	2019/8466	Not Controlled Action	Completed	In buffer area only

Referral decision				
Cascade Valley Residential Development	2011/5832	Referral Decision	Completed	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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EPBC ASSESSMENT OF SIGNIFICANCE

Appendix B

WILDNET SEARCH RESULTS

Appendix B - WildNet Search Result (5 km Search Area)

WN Taxon ID	Kingdom	Class	Family	Scientific name	Common name	NCA status	EPBC status	Superseded	Conservation significant	Establishment	Sensitive species	Sighting records	Specimen records	Sighting summary
18168	Animalia	Actinopterygii	Eleotridae	<i>Mogurnda adspersa</i>	Southern Purple-spotted Gudgeon	-	E	No	Yes	QA	No	5	1	5
1944	Animalia	Aves	Charadriidae	<i>Pluvialis fulva</i>	Pacific Golden Plover	SL	Migratory	No	Yes	QAI	No	1	0	1
1785	Animalia	Aves	Columbidae	<i>Geophaps scripta scripta</i>	Squatter Pigeon (Southern subspecies)	V	V	No	Yes	QA	No	1	0	1
1896	Animalia	Aves	Laridae	<i>Hydroprogne caspia</i>	Caspian Tern	SL	Migratory	No	Yes	QAI	No	3	0	3
1702	Animalia	Aves	Pandionidae	<i>Pandion haliaetus cristatus</i>	Eastern Osprey	SL	Migratory	No	Yes	QAI	No	3	0	3
1883	Animalia	Aves	Rostratulidae	<i>Rostratula australis</i>	Australian Painted-snipe	E	E	No	Yes	QA	No	1	0	1
1874	Animalia	Aves	Scolopacidae	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	V	V; Migratory	No	Yes	QAI	No	2	0	2
1878	Animalia	Aves	Scolopacidae	<i>Calidris ferruginea</i>	Curlew Sandpiper	CR	CE; Migratory	No	Yes	QAI	No	1	0	1
1857	Animalia	Aves	Scolopacidae	<i>Gallinago hardwickii</i>	Latham's Snipe	V	V; Migratory	No	Yes	QAI	No	4	0	4
1867	Animalia	Aves	Scolopacidae	<i>Limosa lapponica baueri</i>	Western Alaskan Bar-tailed Godwit	E	E; Migratory	No	Yes	QAI	No	1	0	1
1855	Animalia	Aves	Scolopacidae	<i>Limosa limosa</i>	Black-tailed Godwit	E	E; Migratory	No	Yes	QAI	No	1	0	1
1853	Animalia	Aves	Scolopacidae	<i>Tringa nebularia</i>	Common Greenshank	E	E; Migratory	No	Yes	QAI	No	1	0	1
1841	Animalia	Aves	Scolopacidae	<i>Tringa stagnatilis</i>	Marsh Sandpiper	SL	Migratory	No	Yes	QAI	No	7	0	7
1825	Animalia	Aves	Threskiornithidae	<i>Plegadis falcinellus</i>	Glossy Ibis	SL	Migratory	No	Yes	QAI	No	11	0	11
800	Animalia	Mammalia	Dasyuridae	<i>Dasyurus hallucatus</i>	Northern Quoll	C	E	No	Yes	QA	No	1	0	1
836	Animalia	Mammalia	Ornithorhynchidae	<i>Ornithorhynchus anatinus</i>	Platypus	SL	-	No	Yes	QA	No	2	0	2
860	Animalia	Mammalia	Phascolarctidae	<i>Phascolarctos cinereus</i>	Koala	E	E	No	Yes	QA	No	2	0	2
962	Animalia	Mammalia	Pteropodidae	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	C	V	No	Yes	QA	No	1	0	1
838	Animalia	Mammalia	Tachyglossidae	<i>Tachyglossus aculeatus</i>	Short-beaked Echidna	SL	-	No	Yes	QAI	No	3	0	3
483	Animalia	Reptilia	Elapidae	<i>Denisonia maculata</i>	Ornamental Snake	V	V	No	Yes	Q	No	1	1	1
8437	Plantae	Equisetopsida	Cycadaceae	<i>Cycas ophiolitica</i>	Marlborough Blue	E	E	No	Yes	NTQ	Yes	11	11	11
9802	Plantae	Equisetopsida	Lamiaceae	<i>Callicarpa thozetii</i>	-	E	-	No	Yes	NTQ	No	1	1	1
11708	Plantae	Equisetopsida	Laxmanniaceae	<i>Cordyline murchisoniae</i>	-	SL	-	No	Yes	NTQ	No	1	0	1
14554	Plantae	Equisetopsida	Myrtaceae	<i>Eucalyptus raveretiana</i>	Black Ironbox	V	V	No	Yes	NTQ	No	3	3	3
17354	Plantae	Equisetopsida	Polypodiaceae	<i>Drynaria rigidula</i>	-	SL	-	No	Yes	NTQ	No	1	0	1
17355	Plantae	Equisetopsida	Polypodiaceae	<i>Drynaria sparsisora</i>	-	SL	-	No	Yes	NTQ	No	1	0	1
16626	Plantae	Equisetopsida	Polypodiaceae	<i>Microsorium punctatum</i>	-	SL	-	No	Yes	NTQ	No	1	0	1
18116	Plantae	Equisetopsida	Pteridaceae	<i>Adiantum aethiopicum</i>	-	SL	-	No	Yes	NTQ	No	1	0	1
18031	Plantae	Equisetopsida	Pteridaceae	<i>Adiantum hispidulum</i>	-	SL	-	No	Yes	NTQ	No	1	0	1
9723	Plantae	Equisetopsida	Pteridaceae	<i>Pellaea falcata</i>	-	SL	-	No	Yes	NTQ	No	1	0	1
41594	Plantae	Equisetopsida	Pteridaceae	<i>Pellaea muelleri</i>	-	SL	-	No	Yes	NTQ	No	1	1	1
17796	Plantae	Equisetopsida	Sterculiaceae	<i>Brachychiton australis</i>	Broad-leaved Bottle Tree	SL	-	No	Yes	NTQ	No	2	0	2
17803	Plantae	Equisetopsida	Sterculiaceae	<i>Brachychiton rupestris</i>	-	SL	-	No	Yes	NTQ	No	1	0	1
16707	Plantae	Equisetopsida	Zamiaceae	<i>Macrozamia miquelii</i>	-	SL	-	No	Yes	NTQ	Yes	1	1	1



WildNet Records

Conservation Significant Species List

For the selected area of interest Lot: 1 Plan: RP613177
Current as at 11/06/2026 WildNetCSSpeciesList

Summary Information

The following table provides an overview of the area of interest: Lot: 1 Plan: RP613177

Table 1. Area of interest details

Size (ha)	
32.37	
Local Government(s)	
Rockhampton Regional	
Catchment(s)	
Fitzroy	
Bioregion(s)	Subregion(s)
Brigalow Belt	Marlborough Plains

Protected Area(s)

No estates or reserves are located within the area of interest.

World Heritage Area(s)

No World Heritage Areas are located within the area of interest.

Ramsar Area(s)

No Ramsar Areas are located within the area of interest.

Introduction

This WildNet report is derived from a spatial layer that is generated from the [WildNet database](#), managed by the Department of the Environment, Tourism, Science and Innovation. The layer, which is generated weekly, contains a subset of WildNet wildlife records that are not classed as erroneous or duplicate, that have a location precision equal to or less than 10000 metres and do not have a count of zero. It does not include aspatial data such as some baseline species lists created for some protected areas.

The WildNet dataset is constantly being enhanced and the taxonomic and status information revised. If a conservation significant species is not listed in this report, it does not mean it doesn't occur there and listed species may also no longer inhabit the area. It is recommended that you also access other internal and external data sources for species information in your area of interest.

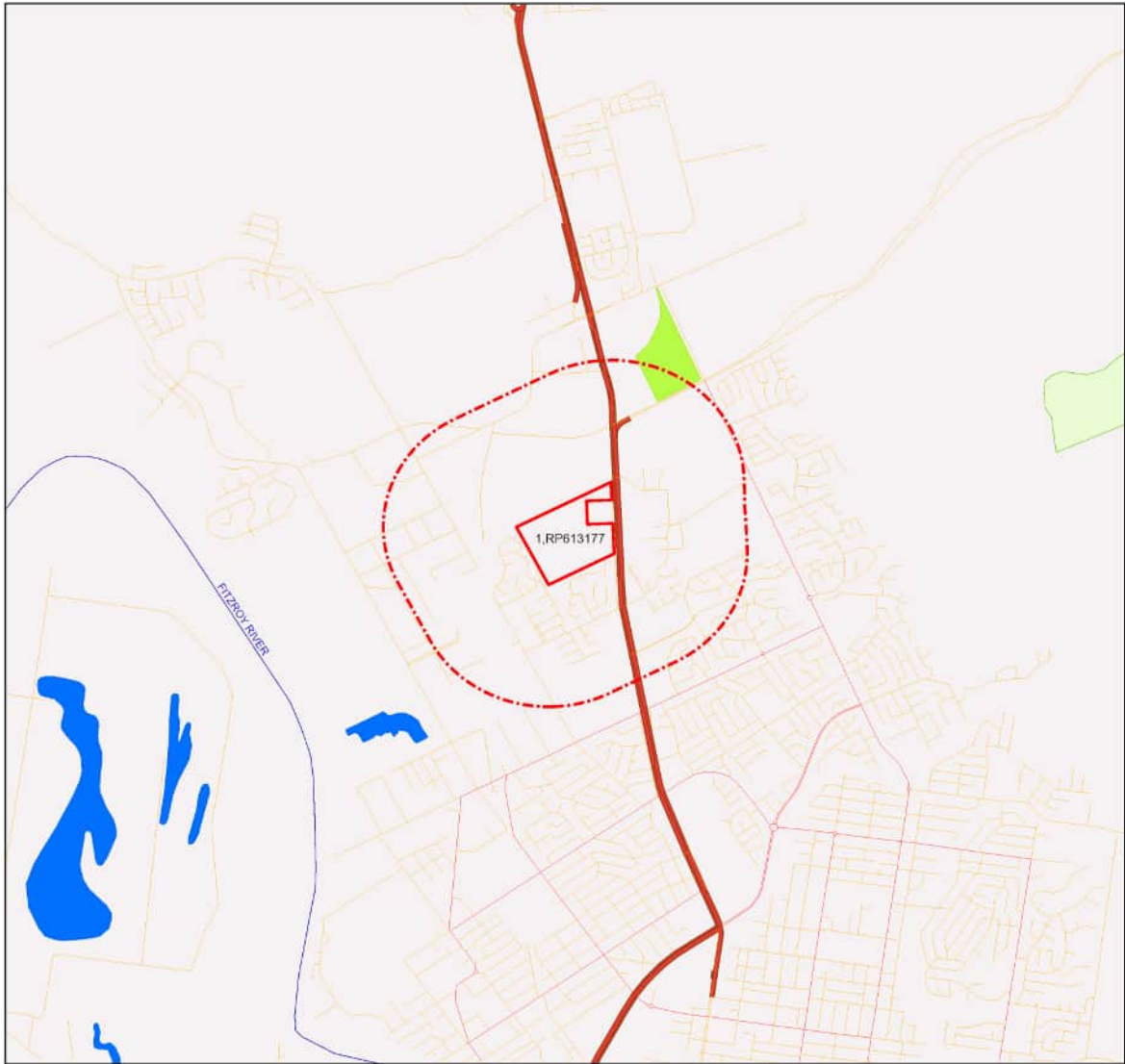
The [WildNet Application](#) may provide additional information on species occurrence within your area of interest.

Conservation significant species are species listed:

- as threatened or near threatened under the *Nature Conservation Act 1992*;
- as threatened under the *Environment Protection and Biodiversity Conservation Act 1999* or
- migratory species protected under the following international agreements:
 - Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention)
 - China-Australia Migratory Bird Agreement
 - Japan-Australia Migratory Bird Agreement
 - Republic of Korea-Australia Migratory Bird Agreement

Table 2 lists the species recorded within the area of interest and its one kilometre buffer.

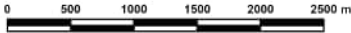
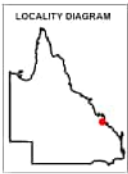
Map 1. Locality Map



Locality Map

Legend

- Towns
- Freeways/Highways
- Connector
- Street/Local Road
- Lakes and reservoirs
- National Park
- National Park (Scientific)
- National Park (CYPAL)
- National Park (Aboriginal Land)
- Conservation Park
- Resources Reserve
- Forest Reserve
- State Forest
- Timber Reserve
- Nature Refuges
- Coordinated Conservation Areas
- Major rivers/creeks
- Queensland
- Selected Lot and Plan
- 1 kilometre buffer



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Table 2. Conservation significant species recorded within the area of interest and its one kilometre buffer

Taxon Id	Kingdom	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
860	Animalia	Mammalia	Phascolarctidae	<i>Phascolarctos cinereus</i>	koala	E	E	0	1	21/08/2011
14554	Plantae	Equisetopsida	Myrtaceae	<i>Eucalyptus raveretiana</i>	black ironbox	V	V	1	1	13/06/2020

Taxon Id: Unique identifier of the taxon from the WildNet database.

NCA: Queensland conservation status of the taxon under the *Nature Conservation Act 1992* (Least Concern (C), Critically Endangered (CR), Endangered (E), Extinct (EX), Near Threatened (NT), Extinct in the Wild (PE), Special Least Concern (SL), and Vulnerable (V)).

EPBC: Australian conservation status of the taxon under the *Environment Protection and Biodiversity Conservation Act 1999* (Conservation Dependent (CD), Critically Endangered (CE), Endangered (E), Extinct (EX), Vulnerable (V), and Extinct in the Wild (XW)).

Specimens: The number of specimen-backed records of the taxon.

Records: The total number of records of the taxon.

Last record: Date of most recent record of the taxon.

Links and Support

Other sites that deliver species information from the [WildNet database](#) include:

- [WildNet Application](#) - public interface to find species information and species lists generated from the WildNet database.
- [Biomaps](#) - view biodiversity information, including WildNet records approved for publication, and generate reports
- [Queensland Globe](#) - view spatial information, including WildNet records approved for publication
- [Qld WildNet Data API](#) - access WildNet species information approved for publication such as notes, images and records etc.
- [Wetland Maps](#) - view species records, survey locations etc. approved for publication
- [Wetland Summary](#) - view wildlife statistics, species lists for a range of area types, and access WildNet species profiles
- [WildNet wildlife records - published - Queensland](#) - spatial layer of WildNet records approved for publication generated weekly
- [Generalised distribution and densities of Queensland wildlife](#) - Queensland species distributions and densities generalised to a 10 km grid resolution
- [Conservation status of Queensland wildlife](#) - access current lists of priority species for Queensland including nomenclature and status information
- [Queensland Confidential Species](#) - the list of species flagged as confidential in the WildNet database.

Please direct queries about this report to the WildNet Team WildNet@detsi.qld.gov.au.

Other useful sites for accessing Queensland biodiversity data include:

- [Useful wildlife resources](#)
- [Queensland Government Data](#)
- [Atlas of Living Australia \(ALA\)](#)
- [Online Zoological Collections of Australian Museums \(OZCAM\)](#)
- [Australasian Virtual Herbarium \(AVH\)](#)
- [Protected Matters Search Tool](#)

Disclaimer

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WildNet Records

Conservation Significant Species List

For the selected area of interest Lot: 70 Plan: SP304746
Current as at 11/06/2026 WildNetCSSpeciesList

Summary Information

The following table provides an overview of the area of interest: Lot: 70 Plan: SP304746

Table 1. Area of interest details

Size (ha)	
132.10	
Local Government(s)	
Rockhampton Regional	
Catchment(s)	
Fitzroy	
Bioregion(s)	Subregion(s)
Brigalow Belt	Marlborough Plains

Protected Area(s)

No estates or reserves are located within the area of interest.

World Heritage Area(s)

No World Heritage Areas are located within the area of interest.

Ramsar Area(s)

No Ramsar Areas are located within the area of interest.

Introduction

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The WildNet dataset is constantly being enhanced and the taxonomic and status information revised. If a conservation significant species is not listed in this report, it does not mean it doesn't occur there and listed species may also no longer inhabit the area. It is recommended that you also access other internal and external data sources for species information in your area of interest.

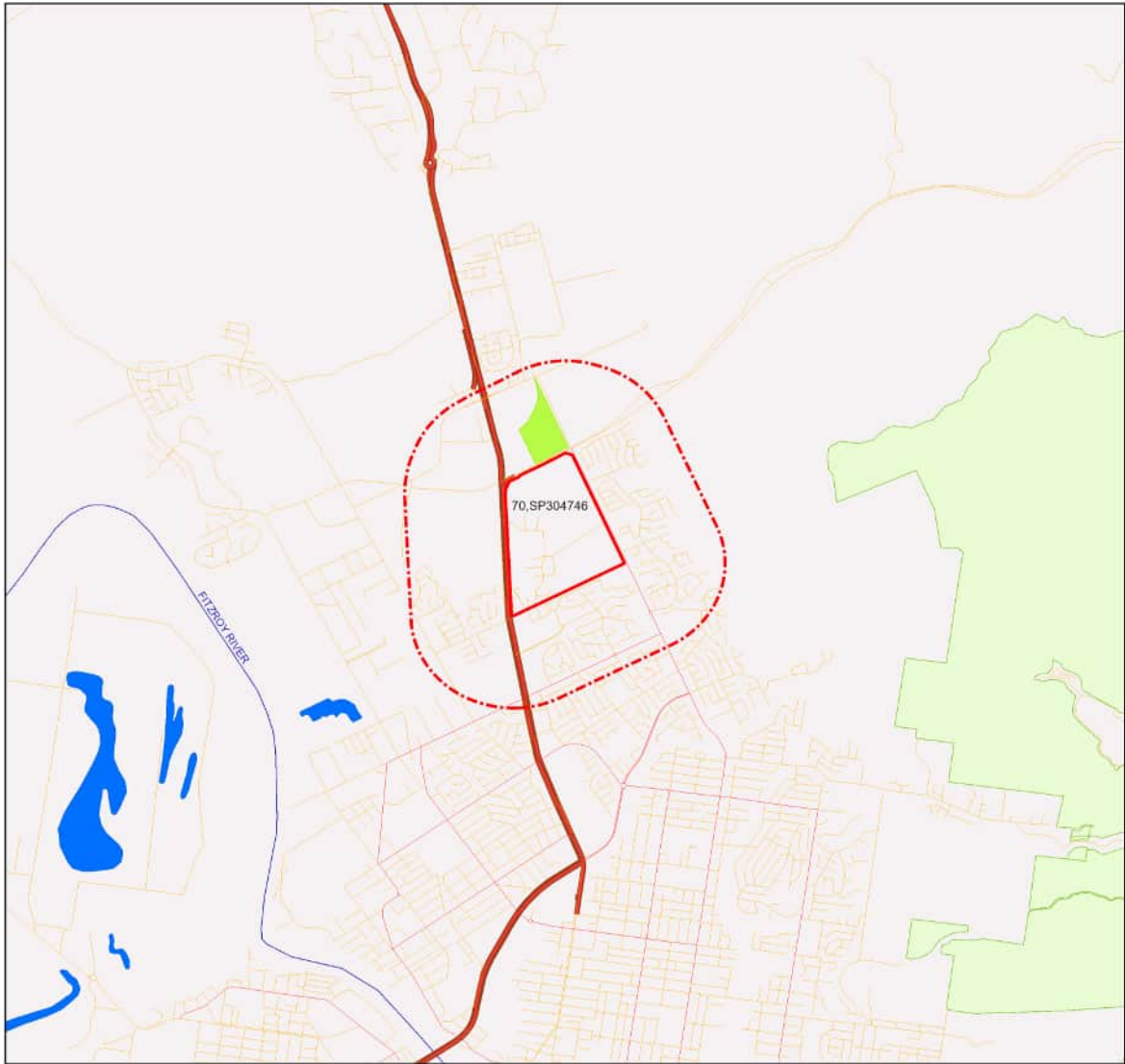
The [WildNet Application](#) may provide additional information on species occurrence within your area of interest.

Conservation significant species are species listed:

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- as threatened under the *Environment Protection and Biodiversity Conservation Act 1999* or
- migratory species protected under the following international agreements:
 - Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention)
 - China-Australia Migratory Bird Agreement
 - Japan-Australia Migratory Bird Agreement
 - Republic of Korea-Australia Migratory Bird Agreement

Table 2 lists the species recorded within the area of interest and its one kilometre buffer.

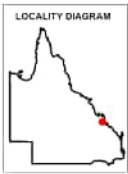
Map 1. Locality Map



Locality Map

Legend

- Towns
- Freeways/Highways
- Connector
- Street/Local Road
- Lakes and reservoirs
- National Park
- National Park (Scientific)
- National Park (CYPAL)
- National Park (Aboriginal Land)
- Conservation Park
- Resources Reserve
- Forest Reserve
- State Forest
- Timber Reserve
- Nature Refuges
- Coordinated Conservation Areas
- Major rivers/creeks
- Queensland
- Selected Lot and Plan
- 1 kilometre buffer



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Table 2. Conservation significant species recorded within the area of interest and its one kilometre buffer

Taxon Id	Kingdom	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
1785	Animalia	Aves	Columbidae	<i>Geophaps scripta scripta</i>	squatter pigeon (southern subspecies)	V	V	0	1	19/03/2003
860	Animalia	Mammalia	Phascolarctidae	<i>Phascolarctos cinereus</i>	koala	E	E	0	1	21/08/2011
838	Animalia	Mammalia	Tachyglossidae	<i>Tachyglossus aculeatus</i>	short-beaked echidna	SL		0	2	10/10/1997
483	Animalia	Reptilia	Elapidae	<i>Denisonia maculata</i>	ornamental snake	V	V	1	1	31/12/1996
8437	Plantae	Equisetopsida	Cycadaceae	<i>Cycas ophiolitica</i>	Marlborough blue	E	E	1	1	5/02/2008
14554	Plantae	Equisetopsida	Myrtaceae	<i>Eucalyptus raveretiana</i>	black ironbox	V	V	1	1	13/06/2020

Taxon Id: Unique identifier of the taxon from the WildNet database.

NCA: Queensland conservation status of the taxon under the *Nature Conservation Act 1992* (Least Concern (C), Critically Endangered (CR), Endangered (E), Extinct (EX), Near Threatened (NT), Extinct in the Wild (PE), Special Least Concern (SL), and Vulnerable (V)).

EPBC: Australian conservation status of the taxon under the *Environment Protection and Biodiversity Conservation Act 1999* (Conservation Dependent (CD), Critically Endangered (CE), Endangered (E), Extinct (EX), Vulnerable (V), and Extinct in the Wild (XW)).

Specimens: The number of specimen-backed records of the taxon.

Records: The total number of records of the taxon.

Last record: Date of most recent record of the taxon.

Links and Support

Other sites that deliver species information from the [WildNet database](#) include:

- [WildNet Application](#) - public interface to find species information and species lists generated from the WildNet database.
- [Biomaps](#) - view biodiversity information, including WildNet records approved for publication, and generate reports
- [Queensland Globe](#) - view spatial information, including WildNet records approved for publication
- [Qld WildNet Data API](#) - access WildNet species information approved for publication such as notes, images and records etc.
- [Wetland Maps](#) - view species records, survey locations etc. approved for publication
- [Wetland Summary](#) - view wildlife statistics, species lists for a range of area types, and access WildNet species profiles
- [WildNet wildlife records - published - Queensland](#) - spatial layer of WildNet records approved for publication generated weekly
- [Generalised distribution and densities of Queensland wildlife](#) - Queensland species distributions and densities generalised to a 10 km grid resolution
- [Conservation status of Queensland wildlife](#) - access current lists of priority species for Queensland including nomenclature and status information
- [Queensland Confidential Species](#) - the list of species flagged as confidential in the WildNet database.

Please direct queries about this report to the WildNet Team WildNet@detsi.qld.gov.au.

Other useful sites for accessing Queensland biodiversity data include:

- [Useful wildlife resources](#)
- [Queensland Government Data](#)
- [Atlas of Living Australia \(ALA\)](#)
- [Online Zoological Collections of Australian Museums \(OZCAM\)](#)
- [Australasian Virtual Herbarium \(AVH\)](#)
- [Protected Matters Search Tool](#)

Disclaimer

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EPBC ASSESSMENT OF SIGNIFICANCE

Appendix C

LIKELIHOOD OF OCCURRENCE TABLES

Fauna Subject Species Likelihood of Occurrence

Scientific Name	Common Name	NCA Status	EPBC Status	Migratory	Preferred Habitat	Likelihood of Occurrence
Birds						
<i>Actitis hypoleucos</i>	Common Sandpaper	-	-	M	Typically breeds in Eurasia, however some tend to remain in Australia and breed throughout the winter. The Common Sandpiper is found in coastal or inland wetlands, both saline and fresh. It is found mainly on muddy edges or rocky shores. During the breeding season in the northern hemisphere, it prefers freshwater lakes and shallow rivers.	PMST LOW – Wetland features are present on site but are limited in extent, and is largely land-locked in an overall disturbed/modified landscape and lack connectivity with other wetland habitats in the locality. No ALA records within a 5 km radius.
<i>Apus pacificus</i>	Fork-Tailed Swift	-	-	M	The Fork-tailed Swift is almost exclusively aerial. They mostly occur over inland plains but sometimes above foothills or in coastal areas. They mostly occur over dry or open habitats, including riparian woodland and tea-tree swamps, low scrub, heathland or salt marsh. They are also found in treeless grassland and sandplains covered with spinifex, open farmland and inland and coastal sand-dunes. They sometimes occur above rainforests, wet sclerophyll forests, open forests or plantations of pines. They probably roost aerially but are occasionally observed to land (Higgins 1999).	PMST LOW – Species may potentially overfly the subject site given its broad inland distribution and aerial habitats, but the site does not contain any habitat features likely to support regular or important use. No ALA records within a 5 km radius.
<i>Botaurus poiciloptilus</i>	Australasian Bittern	E	E	-	Inhabits estuarine and freshwater wetlands, generally with permanent water and dense vegetation of sedges, rushes and reeds, particularly Bullrush and Spikerush. Solitary or groups up to 12. Usually sedentary. Roosts in reeds by day, forages in shallow water at dusk/night for frogs, fish, invertebrates, fruit, leaves. Tramples reeds, sedges to make a foraging platform. Nests in dense vegetation over water.	PMST UNLIKELY – Large permanent wetlands with dense emergent vegetation are absent; available wetland features are very small and modified. No ALA records within a 5 km radius.
<i>Calidris acuminata</i>	Sharp-Tailed Sandpiper	-	V	M	In Queensland, the species is widespread along the coast and is sparsely scattered inland, particularly in central and south-western regions. Species utilises fresh and hypersaline environments, feeding along the edge of water on mudflats, coastal and inland wetlands, and sewage ponds. After rainfall events, the species may also feed on areas of agricultural pasture.	PMST & WildNet LOW – Some minor conformance with preferred habitat types but considered overall as sub-optimal. Two (2) ALA records within a 5 km radius, associated with larger wetland habitats.
<i>Calidris ferruginea</i>	Curlew Sandpiper	CE	CE	M	Occupies littoral and estuarine habitats, non-tidal swamps, lakes and lagoons on the coast. Forages on the edge of shallow waters and occasionally on exposed algal mats / waterweed. Roosts on shell or sand beaches, spits, islets on the coast or in wetlands, sometimes in salt marsh or on rocky shores.	PMST & WildNet No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Calidris melanotos</i>	Pectoral Sandpiper	-	-	M	From the high Arctic this species migrates through the Americas to winter in southern South America. A slight deviation will lead to birds tracking down to	PMST

Scientific Name	Common Name	NCA Status	EPBC Status	Migratory	Preferred Habitat	Likelihood of Occurrence
					Australia. They are found in coastal lagoons, estuaries, bays, swamps, lakes, inundated grasslands, salt marshes, river pools, creeks, floodplains, and artificial wetlands. The species is usually found in coastal or near coastal habitats but occasionally found further inland. It prefers wetlands with open fringing mudflats and low, emergent or fringing vegetation, such as grass or samphire.	LOW – Some minor conformance with preferred habitat types but limited in extent and considered overall as sub-optimal. ALA records within a 5 km radius.
<i>Calonectris leucomelas</i>	Streaked Shearwater	-	-	M	This species is pelagic, but is also found in inshore waters. It occurs in the Pacific Ocean, nesting in Japan and the Korean Peninsula, predominantly on their offshore islands.	PMST No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Charadrius leschenaultii</i>	Greater Sand Plover	V	V	M	In the non-breeding grounds in Australasia, the species is almost entirely coastal, inhabiting littoral and estuarine habitats. They mainly occur on sheltered sandy, shelly or muddy beaches with large intertidal mudflats or sandbanks, as well as sandy estuarine lagoons and inshore reefs, rock platforms, small rocky islands or sand cays on coral reefs). They are occasionally recorded on near-coastal saltworks and saltlakes, including marginal saltmarsh, and on brackish swamps. They seldom occur at shallow freshwater wetlands.	PMST UNLIKELY – Species occupies coastal littoral and estuarine habitats; such habitats are absent within the subject site; No ALA records within a 5 km radius.
<i>Cuculus optatus</i>	Oriental Cuckoo	-	-	M	Oriental Cuckoos inhabit open forests such as monsoon forests, wet sclerophyll forests, paperbark swamps and mangroves. They can be found around subtropical woodland near streams.	PMST UNLIKELY – Habitat requirements not present. No ALA records within 5 km radius.
<i>Epthianura crocea macgregori</i>	Capricorn Yellow Chat	E	CE	-	Inhabits marine plain wetlands that are subject to extensive seasonal inundation and varying degrees of both fresh and saltwater (tidal) influence. The Yellow Chat (Dawson) typically occupies portions of the marine plain that have a network of shallow drainage channels and depressions supporting a mosaic of vegetation that consists of grassland dominated by <i>Sporobolus virginicus</i> and/or <i>Paspalum distichum</i> , dense beds of rush (e.g. <i>Schoenoplectus litoralis</i>) or sedge (e.g. <i>Cyperus alopecuroides</i>), patches of Samphire (<i>Halosarcia</i> spp.), and areas of bare or sparsely-vegetated mud and/or shallow water. These areas are generally without trees, but Grey Mangrove (<i>Avicennia marina</i>) and <i>Ceriops tagal</i> do occur at some occupied sites in tidal areas.	PMST No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Erythroriorchis radiatus</i>	Red Goshawk	E	E	-	The Red Goshawk occurs in coastal and sub-coastal areas in wooded and forested lands of tropical and warm-temperate. Riverine forests are also used	PMST

Scientific Name	Common Name	NCA Status	EPBC Status	Migratory	Preferred Habitat	Likelihood of Occurrence
					frequently. Such habitats typically support high bird numbers and biodiversity, especially medium to large species, which the goshawk requires for prey. The Red Goshawk nests in large trees, frequently the tallest and most massive in a tall stand, and nest trees are invariably within one km of permanent water.	LOW – Some minor conformance with preferred habitat (woodlands with nearby watercourses) but large riparian forests and suitable nest trees near permanent water are lacking; No ALA records within 5 km radius.
<i>Falco hypoleucos</i>	Grey Falcon	V	V	-	Usually restricted to shrubland, grassland and wooded watercourses of arid and semi-arid regions, including the Murray-Darling Basin, Eyre Basin, central Australia and Western Australia. It is occasionally found in open woodlands near the coast. The species is mainly found where annual rainfall is less than 500 mm, except when wet years are followed by drought, when the species might become marginally more widespread, although it is essentially confined to the arid and semi-arid zones at all times. Grey Falcons utilise old nests of other birds of prey and ravens, usually high in a living eucalypt near water or a watercourse. Its peak laying season is in late winter and early spring.	PMST UNLIKELY – Habitat requirements not present. No ALA records within a 5 km radius.
<i>Gallinago hardwickii</i>	Latham's Snipe	-	V	M	The species usually inhabit open, freshwater wetlands with low, dense vegetation. However, they can also occur in habitat with saline or brackish water, in modified or artificial wetlands, and in areas located close to humans or human activity. Smaller numbers inhabit drier habitat, including open woodlands and high-altitude grasslands or herblands, usually those being in proximity to surface water. They usually shelter during the day in small wetlands and tend to disperse after dusk to forage over larger areas.	PMST & WildNet LOW – The site contains some of their preferred habitat, but are limited in extent and land-locked, thus unlikely to serve as important habitat for the species. some habitat parameters are missing. Eleven (11) ALA records within 5km radius. All records in wet habitats within 1 km of Fitzroy River.
<i>Geophaps scripta scripta</i>	Squatter Pigeon	V	V	-	Known to occur within South East and West Queensland, habitat requirements range from open-forest to woodland communities. Mostly dominated by Eucalyptus, Corymbia, Acacia or Callitris species with patchy, tussock-grassy understories that support the subspecies' foraging and breeding requirements. Seasonal or permanent access to nearby water bodies or courses is required, with preference given to bare grounded, gently sloping water sources. Access is particularly important as breeding occurs generally within 1km of a suitable waterbody. Well-draining soils are a habitat requirement for nesting purposes. Diet is mainly comprised of seeds sourced from low vegetation.	PMST & WildNet LIKELY – Woodland and open-forest habitat with grassy understorey occurs within the subject site, consistent with the species' habitat preferences but in a fragmented, urban-fringe and overall sub-optimal condition; Seven (7) ALA records occur within 5 km (including one WildNet record within the subject site).
<i>Hydroprogne caspia</i>	Caspian Tern	-	-	M	The Caspian Tern is mostly found in sheltered coastal embayments (harbours, lagoons, inlets, bays, estuaries and river deltas) and those with sandy or	WildNet

Scientific Name	Common Name	NCA Status	EPBC Status	Migratory	Preferred Habitat	Likelihood of Occurrence
					muddy margins are preferred. They also occur on near-coastal or inland terrestrial wetlands that are either fresh or saline, especially lakes (including ephemeral lakes), waterholes, reservoirs, rivers and creeks. They also use artificial wetlands, including reservoirs, sewage ponds and saltworks. In offshore areas the species prefers sheltered situations, particularly near islands, and is rarely seen beyond reefs.	LOW – Wetland features are present on site but are limited in extent and highly modified, and are unlikely to serve as important habitat for the species; No ALA records within 5 km radius.
<i>Hirundapus caudacutus</i>	White-throated Needletail	V	V	M	Non-breeding migrant species known to occur in large numbers over the eastern Australia coastline and inland through Victoria, NSW and southern areas of QLD. They occur over most types of habitat, however are most often recorded above wooded areas, including open forest and rainforest and fly below the canopy between trees or in clearings. When flying above farmland, they are more often recorded above partly cleared pasture, plantations or remnant vegetation at the edge of paddocks Migration occurs around October annually and residence in Australia until May-August. Spend majority of time in flight and roosts in trees amongst dense foliage in the canopy or in hollows.	PMST LOW – some conformance with preferred habitat (woodland/open-forest airspace and potential roost trees) but overall habitat is fragmented and sub-optimal, and the species is a wide-ranging aerial migrant; no ALA records within 5 km.
<i>Limosa lapponica baueri</i>	Western Alaskan Bar-tailed Godwit	E	E	-	Usually forage near the edge of water or in shallow water within tidal estuaries and harbours. Most feeding takes place on exposed sandy or soft mud substrates on intertidal flats and beaches. Roosting tends to occur on large intertidal sandflats, spits, and banks. Less frequently, roosting occurs within mudflats, estuaries, coastal lagoons, and bays. These sites are often near beds of seagrass and sometimes near saltmarshes. The nest is a depression positioned on a dry elevated site such as a tundra ridge or hummock, often between clumps of grass or under a thicket.	WildNet No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Limosa limosa</i>	Black-tailed Godwit	E	E	M	Primarily coastal habitat environment. The species is commonly found in sheltered bays, estuaries and lagoons with large intertidal mudflats or sandflats, or spits and banks of mud, sand or shell-grit; occasionally recorded on rocky coasts or coral islets. The use of habitat often depends on the stage of the tide. It is also found in shallow and sparsely vegetated, near-coastal, wetlands; such as saltmarsh, saltflats, river pools, swamps, lagoons and floodplains. There are a few inland records, around shallow, freshwater and saline lakes, swamps, dams and bore-overflows. They also use lagoons in sewage farms and saltworks.	WildNet UNLIKELY - Species forages and roosts primarily in coastal and near-coastal habitats such as sheltered estuaries, lagoons and large intertidal flats; these habitats are absent within the inland terrestrial subject site; No ALA records within 5 km radius.

Scientific Name	Common Name	NCA Status	EPBC Status	Migratory	Preferred Habitat	Likelihood of Occurrence
<i>Macronectes giganteus</i>	Southern Giant-petrel	E	E	M	The Southern Giant-Petrel is marine bird that occurs in Antarctic to subtropical waters. In summer, it mainly occurs over Antarctic waters, and it is widespread south as far as the pack-ice and onto the Antarctic continent.	PMST No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Neochmia ruficauda ruficauda</i>	Star Finch (eastern)	E	E	-	Occurs mainly in grasslands and grassy woodlands that are located close to bodies of fresh water. It also occurs in cleared or suburban areas such as along roadsides and in town.	PMST LOW – Some conformance with preferred habitat (grassy woodlands and cleared/grassy areas near freshwater), but habitat within the subject site is fragmented and urban fringe, and considered sub-optimal; Three (3) ALA records within 5 km in the broader locality.
<i>Numenius madagascariensis</i>	Eastern Curlew	CE	CE	M	During the non-breeding season in Australia, the eastern curlew is most commonly associated with sheltered coasts, especially estuaries, bays, harbours, inlets and coastal lagoons, with large intertidal mudflats or sandflats, often with beds of seagrass (Zosteraceae). Occasionally, the species occurs on ocean beaches (often near estuaries), and coral reefs, rock platforms, or rocky islets. The birds are often recorded among saltmarsh and on mudflats fringed by mangroves, and sometimes within the mangroves. The birds are also found in coastal saltworks and sewage farms.	PMST UNLIKELY – Species is strongly associated with coastal and estuarine habitats such as sheltered bays, estuaries and intertidal mud/sandflats; these habitats are absent within the inland terrestrial subject site; No ALA records in the 5 km radius.
<i>Poephila cincta cincta</i>	Southern Black-throated Finch	E	E	-	The Black-throated Finch (southern) occurs mainly in grassy, open woodlands and forests, typically dominated by <i>Eucalyptus</i> , <i>Corymbia</i> and <i>Melaleuca</i> , and occasionally in tussock grasslands or other habitats (for example freshwater wetlands), often along or near watercourses, or in the vicinity of water. Almost all recent records of the finch from south of the tropics have been in riparian habitat. The subspecies is thought to require a mosaic of different habitats in which it can find seed during the wet season. Some of the more common species of eucalypts in woodlands and forests frequented by the subspecies include Narrow-leaved Ironbark, River Red Gum, Silver-leaved Ironbark, Reid River Box, Yellowjacket and Forest Red Gum. The subspecies occasionally occurs in Melaleuca woodlands, or in grasslands comprised of genera such as <i>Astrelba</i> , <i>Dichanthium</i> or <i>Panicum</i> (BTF Recovery Team 2004).	PMST LOW – Some conformance with preferred habitat (grassy open woodland with Eucalyptus crebra and proximity to minor drainage lines), but habitat within the subject site is fragmented and urban-fringe and considered sub-optimal; no confirmed WildNet or ALA records in the locality.
<i>Pandion haliaetus</i>	Osprey	-	-	M	Fish (mostly Mullet) and carrion eater. Forages along coastal rivers, lakes, beaches, creeks and inlets. Tall, dead tree for staging or feeding roost. Nests on exposed tree within 2 km of water, but rarely adjacent, and with access to Paperbark or Swamp Oak for nest material. Breeds April-Sept.	PMST & WildNet UNLIKELY – Species is strongly associated with coastal and substantial inland waterbodies (e.g. Fitzroy River) for foraging and nesting; such habitats are absent within the

Scientific Name	Common Name	NCA Status	EPBC Status	Migratory	Preferred Habitat	Likelihood of Occurrence
						subject site; Four (4) ALA records within 5 km but are associated with the Fitzroy River rather than the subject site itself.
<i>Phaethon lepturus</i>	White-tailed Tropicbird	-	-	M	Pelagic seabirds found across the tropical Atlantic, western Pacific, and Indian Oceans. They spend most of their lives far from land, soaring over open seas and feeding on flying fish, squid, and other small marine prey.	PMST No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Pluvialis fulva</i>	Pacific Golden Plover	-	-	M	In non-breeding grounds in Australia this species usually inhabits coastal habitats, though it occasionally occurs around inland wetlands. Pacific Golden Plovers usually occur on beaches, mudflats and sandflats (sometimes in vegetation such as mangroves, low saltmarsh such as <i>Sarcocornia</i> , or beds of seagrass) in sheltered areas including harbours, estuaries and lagoons, and also in evaporation ponds in saltworks. The species is also sometimes recorded on islands, sand and coral cays and exposed reefs and rocks. They are less often recorded in terrestrial habitats, usually wetlands such as fresh, brackish or saline lakes, billabongs, pools, swamps and wet claypans, especially those with muddy margins and often with submerged vegetation or short emergent grass. Other terrestrial habitats inhabited include short (or, occasionally, long) grass in paddocks, crops or airstrips, or ploughed or recently burnt areas, and they are very occasionally recorded well away from water. On its breeding grounds it occurs in tundra.	WildNet LOW – Species predominantly uses coastal habitats, but may occasionally utilise inland wetlands and short-grass areas; the subject site supports limited, sub-optimal inland wetland features and cleared/grass habitats; Two (2) ALA records within 5 km in the broader locality.
<i>Plegadis falcinellus</i>	Glossy Ibis	SL	-	M	The Glossy Ibis' preferred habitat for foraging and breeding is fresh water marshes at the edges of lakes and rivers, lagoons, flood-plains, wet meadows, swamps, reservoirs, sewage ponds, rice-fields and cultivated areas under irrigation. The species is occasionally found in coastal locations such as estuaries, deltas, saltmarshes and coastal lagoons. Within Australia, the largest contiguous areas of prime habitat are inland and northern floodplains. The Glossy Ibis is commonly in largest numbers in drying Top End grass/sedge swamps and Channel Country grass/forb meadows. The species is sometimes recorded in wooded swamps, artificial wetlands (such as irrigated fields), and in mangroves for breeding. The species may retreat to permanent wetlands and/or coastal areas (including tidal wetlands) during drought. Glossy Ibis roost in trees or shrubs usually near, but sometimes far, from water bodies.	WildNet LOW – Limited freshwater wetland features (small drainage lines and depressions) occur within the subject site and may provide sub-optimal foraging habitat, albeit limited in extent; Fourteen (14) ALA records within 5 km radius in the broader locality, but no large floodplain wetlands or extensive marshes are present on site.

Scientific Name	Common Name	NCA Status	EPBC Status	Migratory	Preferred Habitat	Likelihood of Occurrence
<i>Rostratula australis</i>	Australian Painted Snipe	E	E	-	Mostly recorded in south-eastern Australia particularly in the Murray Darling Basin. In SE QLD it is known from Conondale Ranges and Clarence lowlands. Its range is only predicted in the Gold Coast to Sunshine Coast region. Prefers fringes of swamps, dams and marshlands where there is adequate cover of grasses, low scrub or open timber. Forages nocturnally on mud-flats and in shallow water. Nests in scrapes in the ground lined with leaves and grasses.	PMST & WildNet LOW – The subject site supports limited, sub-optimal wetland habitat (small dams and depressions) with some cover, but lacks extensive shallow wetlands with complex muddy margins and dense low vegetation; the species is known from one ALA record within 5 km and is highly nomadic and patchily distributed.
<i>Thalassarche impavida</i>	Campbell Albatross	-	V	M	The Campbell Albatross is a marine sea bird inhabiting sub-Antarctic and subtropical waters from pelagic to shelf-break water habitats. In the Antarctic, it occurs through the belt of icebergs to the edge of the consolidated pack-ice. The Campbell Albatross does not penetrate the ice-packs, perhaps because ice inhibits soaring by dampening sea swells. They tolerate sea surface-temperatures from 0–24 °C, but are mainly found in the sub-Antarctic (Jehl 1973; Johnstone & Kerry 1976). In breeding and non-breeding seasons, the Campbell Albatross are specialised shelf feeders, concentrating around breeding islands or over adjacent submarine banks. In winter, they are commonly found in the coastal waters of continents, over up-wellings or boundaries of currents.	PMST No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Tringa nebularia</i>	Common Greenshank	-	E	M	The species frequents a variety of freshwater, marine, and artificial wetlands. Forages at the edge of wetlands, in soft mud on mudflats, in channels, or within shallows around the edge of waterbodies. These locations are often situated near or among mangroves or other sparse, emergent or fringing vegetation such as sedges or saltmarsh. Occasionally feeds amongst seagrass beds.	PMST & WildNet UNLIKELY – Species forages on soft mud at the edges of freshwater and coastal wetlands; the subject site supports only small, modified wetland features with very limited soft-mud margins, and no ALA records occur within 5 km; the species is more likely to utilise larger wetlands elsewhere.
<i>Tringa stagnatilis</i>	Marsh Sandpiper	SL	-	M	The Marsh Sandpiper lives in permanent or ephemeral wetlands of varying salinity, including swamps, lagoons, billabongs, salt pans, saltmarshes, estuaries, pools on inundated floodplains, and intertidal mudflats and also regularly at sewage farms and saltworks. They are recorded less often at reservoirs, waterholes, soaks, bore-drain swamps and flooded inland lakes.	WildNet LOW – The subject site supports limited, sub-optimal wetland habitat (small, shallow depressions and drainage lines) that could occasionally be used for foraging; the species is recorded once within 5 km (ALA), but larger wetlands elsewhere are likely to be preferred.
<i>Turnix melanogaster</i>	Black-breasted Button-quail	V	V	-	Normally prefers drier low closed forests, including dry rainforests, vine forest and vine thickets, often in association with Hoop Pine. Understory may be dense or sparse, but a deep, moist leaf-litter layer is important for foraging.	PMST 1 ALA record within 5 km radius

Scientific Name	Common Name	NCA Status	EPBC Status	Migratory	Preferred Habitat	Likelihood of Occurrence
						UNLIKELY – Species' preferred habitats are not recorded within the subject site; One (1) ALA record within 5 km.
Aquatic/Fish/Shark						
<i>Anoxypristis cuspidata</i>	Narrow Sawfish	-	-	M	Body size distributions and capture locations suggest that inshore areas to 10 m depth may be the preferred habitat for juveniles, while adults primarily occur further from shore to 40 m depth. Inhabits shallow coastal waters, estuaries, and can move between fresh, brackish, and marine waters	PMST No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Pristis zijsron</i>	Green Sawfish	-	V	M	Only found north of Cairns in eastern Australia and north of Broome in Western Australia. Inhabits coastal marine and estuarine waters, with juveniles in nearshore and estuarine areas, and adults occurring in deeper continental shelf waters.	PMST No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Mogurnda adspersa</i>	Southern Purple-spotted Gudgeon	-	E	-	The Murray-Darling Basin population is usually located in areas of the Basin that are not subject to flooding, in sluggish, low-flow or no-flow parts of rivers, creeks, billabongs and wetlands. It is most often found in habitats with abundant cover, like snags, rocks, cobble, and aquatic vegetation, especially with submerged vegetation along undercut banks with root masses. This provides shelter for adults and places for females to lay eggs. The southern purple-spotted gudgeon is generally benthic or found close to the banks, amongst vegetation, and sometimes at very shallow depths, especially as juveniles.	WildNet LOW – The southern subject site waterway provides some low-flow aquatic habitat but is smaller and likely more disturbed than known sites; occasional occurrence is possible but habitat is considered sub-optimal compared with nearby creeks and rivers. Five (5) ALA records within the 5 km radius, all recorded within Moores Creek or Fitzroy River.
<i>Sphyrna lewini</i>	Scalloped Hammerhead	E	CD	-	Around the northern coastline to approximately 34°S on both east and west coasts. The species inhabits continental and insular shelves and adjacent deep water from the surface and intertidal areas to at least 275 m depth. The species has also been recorded at 1042 m depth (Moore & Gates 2015).	PMST No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
Mammals						
<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat	E	E	-	Found in moderately wooded habitats such as dry sclerophyll forest, tall open eucalypt forests, woodlands, and sub-alpine woodlands, edge of rainforest and wet sclerophyll forest. Roosts in caves, mines and abandoned bottle-shaped mud nests of Fairy Martins. In caves and mines, they tend to roost in twilight sections near entrance. Insectivorous but habits are poorly known. Fly relatively slowly, direct and maneuverable, low to ground or 6-10m above ground.	PMST UNLIKELY – Habitat requirements not present, no such roosting structures or suitable rock/cave habitats are known within the locality, and there are no ALA records within 5 km.

Scientific Name	Common Name	NCA Status	EPBC Status	Migratory	Preferred Habitat	Likelihood of Occurrence
<i>Dasyurus hallucatus</i>	Northern Quoll	-	E	-	Nocturnal and crepuscular species naturally occurs in Queensland and interstate. Found in abundance in hilly or rocky areas close to permanent water and makes its dens in rock crevices, tree holes or occasionally termite mounds. Quolls are likely to disappear in areas where less than 50-70% woodland remains within a 4km radius.	PMST & WildNet LOW – Some conformance with preferred habitat but the subject site and surrounding landscape are highly fragmented and urban-fringe; Four (4) ALA records within 5 km radius.
<i>Macroderma gigas</i>	Ghost Bat	E	V	-	Occupy habitats ranging from the arid Pilbara to tropical savanna woodlands and rainforests.	PMST UNLIKELY – Species relies on caves, old mine tunnels and deep rock crevices for roosting; roosting structures are not known within the subject site; Four (4) ALA records within 5 km.
<i>Orcaella heinsohni</i>	Australian Snubfin Dolphin	V	V	M	Within Australia, Australian Snubfin Dolphins have been recorded almost exclusively in coastal and estuarine waters. It is doubtful that they venture very far upstream in river systems, although occasional vagrants may venture upstream (Parra et al. 2002a).	PMST No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Petauroides volans</i>	Greater Glider	E	E	-	Wide range of habitats including tall open woodland, eucalypt forests and low woodlands. Locally common in wet sclerophyll forests on the ranges and coastal plains. The species prefers high elevation and moist eucalypt forests. Diet primarily consists of eucalyptus foliage and prefers leaves with high levels of foliar nutrients Spotted (<i>C. citriodora</i>) and Red Forest gums (<i>E. tereticornis</i>).	PMST UNLIKELY – Species is most strongly associated with tall, moist, high-elevation wet sclerophyll forests; the subject site is dominated by dry open Eucalyptus woodland and regrowth, with no mapped wet sclerophyll or high-elevation forest; No ALA records within 5 km.
<i>Petaurus australis australis</i>	Yellow-bellied Glider	V	V	-	Moist and dry mature eucalypt forest and woodland, dry sclerophyll open forest containing smooth barked eucalypts that shed their bark in strips, has a moderate rainfall (650-1200 mm). Tree hollows, diversity of winter-flowering and suitable sap-feeding eucalypt species required. Large territory. Diet primarily consists of plant and insect exudates (<i>eucalypt</i> sap, nectar, honeydew and manna). Spotted gum (<i>C. citriodora</i>), forest red gum (<i>E. tereticornis</i>) and the locally occurring grey gum (<i>E. propinqua</i>) are preferable species.	PMST UNLIKELY – The study site supports fragmented open Eucalyptus woodland and regrowth with limited evidence of suitable sap trees and no local records; No ALA records within 5 km.
<i>Phascolarctos cinereus</i>	Koala	E	E	-	Eucalypt forest. Areas where preferred food species occur in sufficient concentrations and diversity with suitable edaphic conditions and presence of other Koalas.	PMST & WildNet FAIR – The study site supports eucalypt woodland and regrowth that includes potential koala food trees, albeit in a fragmented, urban-fringe landscape; Two (2) ALA records within a 5km radius, one of which within 1km. Not detected during AECOM;s 2025-26 surveys.

Scientific Name	Common Name	NCA Status	EPBC Status	Migratory	Preferred Habitat	Likelihood of Occurrence
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	-	V	-	The Grey-headed Flying-fox requires foraging resources and roosting sites. 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. It also feeds on commercial fruit crops and on introduced tree species in urban areas. The primary food source is blossom from Eucalyptus and related genera but in some areas it also utilises a wide range of rainforest fruits (Eby 1998). 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, but colonies also use highly modified vegetation in urban and suburban areas.	PMST & WildNet 1 ALA record within a 5km radius LOW – The subject site supports flowering eucalypts and urban-fringe vegetation that could provide occasional foraging resources for Grey-headed Flying-fox, but habitat is fragmented and no permanent roost or camp sites are known on or adjacent to the subject site; one (1) ALA record occurs within 5 km.
<i>Sousa sahalensis</i>	Australian Humpback Dolphin	V	V	M	Within their geographical range, Australian humpback dolphins are found primarily in coastal waters (Parra & Cagnazzi 2016). Opportunistic data collected during aerial surveys designed to estimate the distribution and abundance of dugongs in the Great Barrier Reef indicated that Australian humpback dolphins were sighted on average 6.4 km (SE=1.26, range 0–55.6 km) from the nearest point of land and 2.7 km (SE=0.27, range=0–8.1 km) to the nearest shallow area (either point of land or charted reef, less than 2 m deep at low tide). In Queensland and in the Northern Territory, Australian humpback dolphins have been recorded mostly within 10 km of the coast.	PMST No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
Reptiles						
<i>Caretta caretta</i>	Loggerhead Turtle	E	E	M	In Australia, Loggerhead Turtles nest on open, sandy beaches (Spotila 2004). Hatchlings enter the open ocean and begin feeding on small animals. Small Loggerhead Turtles live at or near the surface of the ocean and move with the ocean currents. Loggerhead Turtles choose a wide variety of tidal and sub-tidal habitat as feeding areas (Limpus 2008a). Loggerhead Turtles show fidelity to both their foraging and breeding areas (Limpus 2008a).	PMST No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Chelonia mydas</i>	Green Turtle	V	V	M	Green Turtles spend their first five to ten years drifting on ocean currents. During this pelagic (ocean-going) phase, they are often found in association	PMST

Scientific Name	Common Name	NCA Status	EPBC Status	Migratory	Preferred Habitat	Likelihood of Occurrence
					with driftlines and rafts of Sargassum. Once Green Turtles reach 30 to 40 cm curved carapace length, they settle in shallow benthic foraging habitats such as tropical tidal and sub-tidal coral and rocky reef habitat or inshore seagrass beds. The shallow foraging habitat of adults contains seagrass beds or algae mats on which Green Turtles mainly feed.	No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Crocodylus porosus</i>	Salt-water Crocodile	V	-	M	Studies from Arnhem Land (Northern Territory) indicated that the Salt-water Crocodile mostly occurs in tidal rivers, coastal floodplains and channels, billabongs and swamps up to 150 km inland from the coast (Webb et al. 1983f). It has been noted that evaporation in isolated channels may lead to salinity levels that are twice that of seawater. The Salt-water Crocodile usually inhabits the lower (estuarine) reaches of rivers, while the upper reaches are inhabited by <i>Crocodylus johnstoni</i> (Fresh-water Crocodile); although, areas of overlap occur in some rivers. In Queensland, the species is usually restricted to coastal waterways and floodplain wetlands. Populations may also be found hundreds of kilometres upstream, such as in the Fitzroy River and the waterways of the southern Gulf of Carpentaria (Read et al. 2004).	PMST No direct ecological nexus to subject site – species inhabits tidal rivers, coastal floodplains, estuaries and large river systems; no tidal or estuarine waterways occur within the inland terrestrial subject site, and any habitat in the Fitzroy River is off-site; species excluded from further assessment.
<i>Delma torquata</i>	Adorned Delma	V	V	-	Normally inhabits eucalypt dominated woodland and open forest where it is associated with suitable micro-habitats (exposed rocky outcrops). The ground cover is predominantly native grasses, such as Kangaroo Grass (<i>Themeda triandra</i>), Barbed-wire Grass (<i>Cymbopogon refractus</i>), Wiregrass (<i>Aristida</i> sp.) and Lomandra (<i>Lomandra</i> sp.).	PMST UNLIKELY – Species typically inhabits eucalypt woodland and open forest with exposed rocky outcrops and dense native grass/leaf-litter microhabitat; only small areas of potentially suitable microhabitat occur in the southern Subject site and there are no reliable local records.
<i>Denisonia maculata</i>	Ornamental Snake	V	V	-	The Ornamental Snake's preferred habitat is within, or close to, habitat that is favoured by its prey - frogs. The species is known to prefer woodlands and open forests associated with moist areas, particularly gilgai (melon-hole) mounds and depressions in Queensland Regional Ecosystem Land Zone 4, but also lake margins and wetlands (Agnew 2010 pers. comm.; Brigalow Belt Reptiles Workshop 2010; Wilson & Knowles 1988). Gilgai formations are found where deep-cracking alluvial soils with high clay contents occur (Brigalow Belt Reptiles Workshop 2010).	PMST & WildNet UNLIKELY – Species prefers woodlands and open forests on cracking-clay gilgai (Land Zone 4) near wetlands; these habitats are absent within the subject site, with only small disturbed patches of cracking clay present, and the species has only older or imprecise records near the site; Twenty-four (24) ALA records within the 5 km search area, one of which within 1 km from subject site. The rest are all in the southern margin of the 5 km search area.
<i>Dermochelys coriacea</i>	Leatherback Turtle	E	E	M	The Leatherback Turtles is a highly pelagic species, venturing close to shore mainly during the nesting season (Sarti Martinez 2000). It is known from waters all around Australia (Robins et al. 2002) and can be found foraging	PMST

Scientific Name	Common Name	NCA Status	EPBC Status	Migratory	Preferred Habitat	Likelihood of Occurrence
					year-round in Australian waters (Limpus in Hamann et al. 2006) over Australian continental shelf waters.	No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Furina dunmalli</i>	Dunmall's Snake	V	V	-	Found in open forest, particularly brigalow <i>Acacia harpophylla</i> forest and woodland growing on floodplains of deep-cracking black clay and clay loam soils. Little is known about this species though it is thought to be uncommon within its limited range. The distribution of this species is associated with the Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant) TEC.	PMST UNLIKELY – Species is associated with brigalow on deep-cracking black clay floodplains; within the subject site only minor brigalow patches occur and mapped soils/REs lack extensive cracking-clay habitat, and there are no reliable records within 5 km.
<i>Egernia rugosa</i>	Yakka Skink	V	V	-	The Yakka Skink is known to occur in open dry sclerophyll forest, woodland and scrub. The core habitat of this species is within the Mulga Lands and Brigalow Belt South Bioregions (TSN 2008b). It occurs in a wide variety of vegetation types within Queensland Regional Ecosystem Land Zones (LZ): LZ 3 - Alluvium (river and creek flats), LZ 4 - Clay plains not associated with current alluvium, LZ 5 - Old loamy and sandy plains, LZ 7 - Ironstone jump-ups, LZ 9 - Undulating country on fine-grained sedimentary rocks, LZ 10 - Sandstone ranges. It's commonly found in cavities under and between partly buried rocks, logs or tree stumps, root cavities and abandoned animal burrows. The species often takes refuge in large hollow logs and has been known to excavate deep burrow systems, sometimes under dense ground vegetation. In cleared habitat, this species can persist where there are shelter sites such as raked log piles, deep gullies, tunnel erosion/sinkholes and rabbit warrens. The species has also been found sheltering under sheds and loading ramps. This species is not generally found in trees or rocky habitat.	PMST UNLIKELY – Species is associated with rocky outcrops and dense ground-layer habitat in brigalow and dry sclerophyll woodlands; these features are largely absent or very limited within the subject site, and there are no reliable local records.
<i>Eseya albagula</i>	Southern Snapping Turtle	CE	CE	-	Found only in Queensland in the Fitzroy, Mary and Burnett Rivers and associated smaller drainages in south eastern Queensland.	PMST No direct ecological nexus to subject site. Species is restricted to deeper permanent reaches of the Fitzroy, Mary and Burnett Rivers and associated major drainages; no such riverine habitats occur within the inland subject site, and any suitable habitat is limited to off-site reaches of the Fitzroy River.
<i>Eretmochelys imbricata</i>	Hawksbill Turtle	E	V	M	Hawksbill Turtles spend their first five to ten years drifting on ocean currents (Carr 1987a; Limpus et al. 1994e). During pelagic (ocean-going) phase, they are often found in association with rafts of Sargassum. Then settle and forage	PMST

Scientific Name	Common Name	NCA Status	EPBC Status	Migratory	Preferred Habitat	Likelihood of Occurrence
					in tropical tidal and sub-tidal coral and rocky reef habitat. They have also been found, though less frequently, within seagrass habitats of coastal waters, as well as the deeper habitats of trawl fisheries.	No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Furina dunmalli</i>	Dunmall's Snake	DD	V	-	Found in a broad range of habitats, including: Forests and woodlands on black alluvial cracking clay and clay loams dominated by Brigalow (<i>Acacia harpophylla</i>), other Wattles (<i>A. burrowii</i> , <i>A. deanii</i> , <i>A. leioclyx</i>), native Cypress (<i>Callitris</i> spp.) or Bull-oak (<i>Allocasuarina luehmannii</i>); Various Blue Spotted Gum (<i>Corymbia citriodora</i>), Ironbark (<i>Eucalyptus crebra</i> and <i>E. melanophloia</i>), White Cypress Pine (<i>Callitris glaucophylla</i>) and Bulloak open forest and woodland associations on sandstone derived soils. In other environments, one specimen was found on the edge of dry vine scrub near Tarong Power Station, Queensland, whilst another was found in hard ironstone country (Queensland Regional Ecosystem Land Zone 7) at Lake Broadwater near Dalby, Queensland. Little is known about the ecological requirements of Dunmall's Snake, however, the species has been found sheltering under fallen timber and ground litter (Brigalow Belt Reptiles Workshop 2010; Cogger et al. 1993) and may use cracks in alluvial clay soils (QLD DERM 2010; Richardson 2006).	PMST UNLIKELY – Species is associated with brigalow and other open forests on deep cracking clays and clay loams; within the subject site these habitats are absent or limited to very small brigalow patches on non-cracking substrates, and there are no reliable records within 5 km.
<i>Hemiaspis damelii</i>	Grey Snake	E	E	-	In Queensland, the grey snake has a broader and more dispersed distribution, with most records along the Macintyre and Condamine Rivers and associated floodplains of the southern Brigalow Belt from Goondiwindi and Dalby west to Glenmorgan, on the Darling Downs and western Lockyer Valley, near Rockhampton on the central Queensland coast, and on the Darling Riverine Plains near Currawinya in south-western Queensland. The elevations of occurrence records range from 70 m above sea level in the Lowbidgee region to 540 m on elevated floodplains near Toowoomba in Queensland.	PMST UNLIKELY – Species favours brigalow/belah woodlands on heavier cracking clay soils near water; within the subject site only minor disturbed cracking-clay patches and small brigalow stands occur; Fifteen (15) ALA records within 5 km radius, all at the southern limits of the broader locality.
<i>Lepidochelys olivacea</i>	Olive Ridley Turtle	E	E	M	Female Olive Ridley Turtles lay clutches of eggs on sandy beaches, hatchlings disperse into offshore currents and have a pelagic phase of unknown length (Musick & Limpus 1997). Small juveniles through to adults reside in coastal zones along the northern coast of Australia and historical bycatch data indicates that large immature and adult-sized Olive Ridleys are present all year round over soft bottomed habits of northern Australian continental shelf waters (Musick & Limpus 1997).	PMST No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.

Scientific Name	Common Name	NCA Status	EPBC Status	Migratory	Preferred Habitat	Likelihood of Occurrence
<i>Mobula alfredi</i> as <i>Manta alfredi</i>	Reef Manta Ray	-	-	M	Known on Australian waters from about Perth, Western Australia, around the tropical north to at least Sydney, New South Wales; also Cocos (Keeling) Islands and Christmas Island in the eastern Indian Ocean. Elsewhere the species is circumglobal in tropical waters. Although Manta Rays are often seen inshore around coral and rocky reefs in tropical and subtropical waters, they also occur around offshore reefs and seamounts.	PMST No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Mobula birostris</i> as <i>Manta birostris</i>	Giant Manta Ray	-	-	M	Off Exmouth, Western Australia, around the tropical north to at least the Solitary Islands, New South Wales; also, Cocos (Keeling) Islands and Christmas Island in the eastern Indian Ocean. Australian records need confirmation due to confusion with <i>Manta alfredi</i> . Elsewhere the species is circumglobal in tropical and temperate waters throughout the Pacific, Indian, and Atlantic Oceans in coastal and pelagic waters from the surface to a depth of 1,000 m. The species occurs in areas with regular upwelling along coastlines, oceanic islands, and offshore pinnacles and seamounts. Giant Manta Rays aggregate around Ningaloo Reef during autumn and winter.	PMST No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Natator depressus</i>	Flatback Turtle	V	V	M	Post-hatchling and juvenile Flatback Turtles do not have the wide dispersal phase in the oceanic environment like other sea turtles (Walker & Parmenter 1990). Adults inhabit soft bottom habitat over the continental shelf of northern Australia, extending into Papua New Guinea and Irian Jaya (Spring 1982; Zangerl et al. 1988) although the extent of their range is not fully known (Zangerl et al. 1988). Capture locations from trawlers indicate that Flatback Turtles feed in turbid, shallow inshore waters north of latitude 25° S in depths from less than 10 m to depths of over 40 m (Robins 1995). Nesting habitat includes sandy beaches in the tropics and subtropics with sand temperatures between 25 °C and 33 °C at nest depth (Limpus 1995a).	PMST No direct ecological nexus to subject site – species dependent on marine/coastal habitats absent from site; excluded from further assessment.
<i>Rheodytes leukops</i>	Fitzroy River Turtle	E	E	-	The Fitzroy River Turtle is found in rivers with large deep pools with rocky, gravelly or sandy substrates, connected by shallow riffles. Preferred areas have high water clarity, and are often associated with Ribbonweed (<i>Vallisneria</i> sp.) beds. Common riparian vegetation associated with the Fitzroy River Turtle includes Blue Gums (<i>Eucalyptus tereticornis</i>), River Oaks (<i>Casuarina cunninghamiana</i>), Weeping Bottlebrushes (<i>Callistemon viminalis</i>) and Paperbarks (<i>Melaleuca linariifolia</i>). Turtles often associate with logs in deeper water, and may sit on the downstream side or under rocks in fast flowing riffles.	PMST Unlikely - Although the on-site creek is hydrologically within the Fitzroy catchment, within the subject site it is a small, disturbed tributary lacking the deep pools, riffles and clear, rocky-sandy channels used by Fitzroy River Turtle; suitable habitat is confined to downstream main-channel reaches; No ALA recorded within a 5 km radius.

Flora Subject Species Likelihood of Occurrence

Scientific Name	Common Name	NCA Status	EPBC Status	Preferred Habitat	Likelihood of Occurrence
<i>Cupaniopsis shirleyana</i>	Wedge-leaf Tuckeroo	V	V	The Wedge-leaf Tuckeroo occurs in a variety of dry rainforest vegetation types, including vine thicket communities on hillsides, stream beds and along riverbanks at altitudes up to 550 m above sea level. This species is also likely to occur on the margins of native vegetation in scrubby urbanised areas (Thomas & McDonald 1989). The Wedge-leaf Tuckeroo is predominately found on dark brown sandy loams and sandy clay loams (pH 5-7.5) and rocky scree slopes. Generally, these soils have formed from volcanic parent materials (mainly granites and granodiorites, basalt and andesitic flows, and pyroclastics) (Barry & Thomas 1994).	PMST UNLIKELY – Species is associated with dry rainforest / vine thicket on volcanic-derived sandy loams and rocky scree; these habitats and substrates are absent within the subject site, and targeted flora surveys did not detect the species.
<i>Cycas ophiolitica</i>	Marlborough Blue	E	E	grows on hills and slopes in sparse, grassy open forest at altitude ranges from 80–400 m above sea level. Although this species reaches its best development on red clay soils near Marlborough, it is more frequently found on shallow, stony, infertile soils, which are developed on sandstone and serpentinite, and is associated with species such as <i>Corymbia dallachiana</i> , <i>C. erythrophloia</i> , <i>C. xanthope</i> and <i>Eucalyptus fibrosa</i> . <i>Cycas ophiolitica</i> has also been found on mudstone in association with <i>Corymbia dallachiana</i> , <i>C. erythrophloia</i> and <i>Eucalyptus crebra</i> , and on alluvial loams with <i>Corymbia intermedia</i> , <i>Eucalyptus drepanophylla</i> and <i>E. tereticornis</i> (Hill 1998a; Queensland Herbarium 2007).	PMST & WildNet PRESENT – Two individuals recorded during 2026 protected plant survey within suitable regional ecosystem; sixteen (16) ALA records within 5 km radius, all recorded adjacent William Palfrey Road, approximately 1.9km northwest of the subject site.
<i>Dichanthium setosum</i>	Bluegrass	-	V	Occurs in heavy soils (predominantly cracking clays or alluvium, often in gilgai) in woodland or open woodland usually dominated by Acacia (brigalow) and/or Eucalyptus species. The climate is tropical to subtropical and markedly seasonal with the habitat drying out for part of the year (Ayers, 1996; Queensland Herbarium, 2012).	PMST UNLIKELY – Species favours woodland/open woodland on heavy cracking clays and gilgai (often brigalow/Eucalyptus clay plains); within the subject site only small, disturbed cracking-clay patches and minor brigalow stands occur, and targeted surveys did not record the species.
<i>Eucalyptus raveretiana</i>	Black Ironbox	V	V	Grows along watercourses, and sometimes on river flats or open woodland. Soil varies from sand through to heavy clay (Halford 1997c). The species is said to be highly salt tolerant. Black Ironbox does not occur in pure stands, but is co-dominant with species such as Broad-leaved Teatree (<i>Melaleuca leucadendra</i>), <i>M. fluviatilis</i> , Forest Red Gum (<i>Eucalyptus tereticornis</i>), Carbeen (<i>Corymbia tessellaris</i>) (RE 11.3.25a) and occasionally in semi evergreen vine thicket (e.g. Broad-leaved Bottle Tree (<i>Brachychiton australis</i>), Narrow-leaved Bottle Tree (<i>Brachychiton rupestris</i>), Scrub Wilga (<i>Geijera salicifolia</i>) and <i>Lysiphyllum</i> spp.) (RE 11.3.11). Other species it grows in association with include River Red Gum (<i>E. camaldulensis</i>), Moreton Bay Ash (<i>Corymbia tessellaris</i>), River Oak (<i>Casuarina cunninghamiana</i>) and Weeping Paperbark (<i>Melaleuca fluviatilis</i>) (BAAM 2011) and other Regional Ecosystems that include RE 9.3.1 and RE 8.3.3 (BAAM 2011). The distribution of Black Ironbox overlaps	PMST & WildNet LOW – Riparian <i>E. tereticornis</i> / <i>Corymbia</i> woodland occurs along on-site watercourses and multiple ALA records (including within 1 km) indicate regional presence; however, key REs where the species is most characteristic are absent and targeted surveys did not detect any individuals. Twenty-six (26) ALA records within 5 km radius, three of which within the 1 km radius.

Scientific Name	Common Name	NCA Status	EPBC Status	Preferred Habitat	Likelihood of Occurrence
				with the following EPBC Act-listed threatened ecological communities: Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant); Bluegrass (<i>Dichanthium</i> spp.) dominant grasslands of the Brigalow Belt Bioregions (North and South); Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions.	
<i>Leichhardtia brevifolia</i> (listed as <i>Marsdenia brevifolia</i>)	-	V	V	North of Rockhampton, <i>M. brevifolia</i> grows on serpentine rock outcrops or crumbly black soils derived from serpentine in eucalypt woodland, often with Broad-leaved Ironbark (<i>Eucalyptus fibrosa</i>) and <i>Corymbia xanthope</i> . At Hidden Valley near Paluma, plants grow in woodland on granite soils dominated by Granite Ironbark (<i>E. granitica</i>), Rustyjacket (<i>C. leichhardtii</i>) and White Mahogany (<i>E. acmenoides</i>). On Magnetic Island the species occurs in open forest on dark acid agglomerate soils dominated by Narrow-leaved Ironbark (<i>E. drepanophylla</i>) (Forster 1995a). In the Springsure area <i>M. brevifolia</i> grows in eucalypt woodland (BRI collection records n.d.).	PMST UNLIKELY – Species is associated with serpentine outcrops and crumbly black serpentine-derived soils in <i>Eucalyptus fibrosa</i> / <i>Corymbia xanthope</i> woodland; these substrates, associated eucalypts and any records are absent within 5 km of the subject site, and targeted protected-plant surveys did not detect the species.
<i>Pimelea leptospermoides</i>	-	-	V	<i>Pimelea leptospermoides</i> is restricted to stony ridges, slopes and flats in sandy clay soils derived from serpentine. Serpentine soils have toxic levels of various metals and a general deficiency of the plant macro-nutrients. The species is found in most vegetation communities on serpentine soils, but not in riverine forests on black clays or dry rainforest on stony red and brown clay-loams and clays (QDNR 2000). <i>Pimelea leptospermoides</i> typically occurs in open <i>Eucalyptus fibrosa</i> subsp. <i>fibrosa</i> – <i>Corymbia xanthope</i> woodland, often with a shrubby understorey including <i>Xanthorrhoea johnsonii</i> , <i>Macrozamia serpentina</i> and <i>Acacia</i> sp.s (Queensland Herbarium 2009a; Rye 1990). The species also occurs in (QDNR 2000): tall to low open-forest, all with a grassy and/or heathy understorey; woodland with a <i>Melaleuca bracteata</i> understorey, where prolonged flooding occurs.	PMST UNLIKELY – Species is restricted to serpentine-derived sandy clay soils on stony ridges and flats, typically in <i>Eucalyptus fibrosa</i> – <i>Corymbia xanthope</i> serpentine woodland; these substrates, associated species and any records are absent within 5 km of the subject site, and targeted protected-plant surveys did not detect the species.
<i>Samadera bidwillii</i>	Quassia	V	V	Commonly occurs in lowland rainforest often with <i>Araucaria cunninghamii</i> or on rainforest margins, but it can also be found in other forest types, such as open forest and woodland, it is commonly found in areas adjacent to both temporary and permanent watercourses up to 510 m altitude. Commonly associated trees in the open forest and woodlands include spotted gum (<i>Corymbia citriodora</i>), grey gum (<i>Eucalyptus propinqua</i>), white mahogany (<i>E. acmenoides</i>), forest red gum (<i>E. tereticornis</i>), pink bloodwood (<i>Corymbia intermedia</i>), ironbark (<i>E. siderophloia</i>), gum topped box (<i>E. moluccana</i>), Gympie messmate (<i>E. cloeziana</i>) and broad-leaved ironbark (<i>E. fibrosa</i>).	PMST UNLIKELY – Species favours lowland rainforest and rainforest margins, or mesic open forest/woodland adjacent to watercourses; only marginally suitable <i>Eucalyptus/Corymbia</i> woodland occurs within the subject site, no reliable records occur within 5 km, and the species was not detected during protected plant surveys.



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