ECOLOGICAL ASSESSMENT 58-68 DELANCEY STREET, ORMISTON

Prepared for The Hub Precinct Pty Ltd







Biodiversity Assessment and Management Pty Ltd PO Box 1376 CLEVELAND 4163



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Managing Director

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EXECUTIVE SUMMARY

INTRODUCTION

This report has been prepared for The Hub Precinct Pty Ltd to document the results of an ecological assessment over land proposed for the development of an integrated Health and Education precinct on Lots 0/SP308738, 0–2/SP308739; 0/SP308740; 4/SP308740; 10–16/SP314782, located at 58-68 Delancey Street, Ormiston (the 'Subject Site'). The assessment is required to inform an application to have the project declared a Ministerial Infrastructure Designation.

METHODOLOGIES

The ecological assessment combined a desktop review to broadly characterise the currently recognised ecological values of the Subject Site, with a field survey to verify the ecological values and enable an informed assessment of potential impacts from the proposed development. The survey involved the ground-truthing of vegetation and associated habitat values for potentially occurring significant species, with a particular focus on identifying and documenting Koala *Phascolarctos cinereus* habitat trees.

GENERAL ECOLOGICAL VALUES

The majority of the Subject Site has been previously cleared and developed for agricultural uses and existing commercial infrastructure, with native vegetation and associated habitat values restricted to the western-most 1 ha of the Subject Site. This area comprised dense stands of Broad-leaved Paperbark *Melaleuca quinquenervia* surrounding a large dam, with some *Eucalyptus, Lophostemon* and *Corymbia* trees. The shrub layer and ground cover was sparse, most likely a result of grazing by stock.

The native vegetation on site included a range of Koala habitat tree species, and a number of large trees with small hollows suitable for frogs, reptiles, small mammals and small birds. The dam provided habitat for locally common frog species. Fallen debris and deep leaf litter provided habitat for small mammals, reptiles and frogs.

SUMMARY OF ECOLOGICAL CONSTRAINTS AND LEGISLATIVE OBLIGATIONS

Commonwealth Considerations

The field survey has confirmed that the Subject Site contains one Threatened Ecological Community (TEC) though this is not expected to be impacted by the proposed actions. There are no threatened flora species listed under the EPBC Act known or expected to occur.

The Subject Site supports Koala habitat, although any impacts upon this habitat are unlikely to be significant. Overall, a referral to the Commonwealth for the proposed action is not warranted in relation to impacts matters of national environmental significance.

Two forage species of significance to the vulnerable Grey-headed Flying-fox are present on the subject site, and 20 individuals of these species occur within the footprint of a proposed retaining wall. On assessment against the relevant significant impact criteria, it is not considered the loss of these trees would represent a significant impact and referral of the action is not warranted in relation to Greyheaded Flying-fox.

Weeds of National Significance were recorded on the Subject Site, the appropriate management of which is legally required by the landholders.

State Considerations

Matters of State Environmental Significance (MSES)

The Subject Site does not support regulated vegetation, although has been recently mapped as containing a "Locally Refined Koala Habitat Area". As the Subject Site is also located within a Koala Priority Area, any interference with the mapped Koala habitat is classified as "Prohibited Development" under the Queensland *Planning Act 2016*, subject to any applicable exemptions.

Concept designs provided to inform this assessment indicate a portion of the mapped Koala habitat may be cleared for the construction of a 4 m high retaining wall. As no more than 500m² of the mapped Koala habitat is to be cleared for the proposed development the proposed roadway would meet the definition of "Exempted Development" under Schedule 24 of the *Planning Regulation 2017*; i.e.:

(k) development, other than development mentioned in any of paragraphs (a) to (j), that results in a total area on the premises of



500m2 or less of 1 or more koala habitat areas being cleared of native vegetation since 7 February 2020, disregarding an area cleared of native vegetation if any of paragraphs (I) to (p) applies to the clearing. We understand this would be considered by the designator under a section 36 application.

We consider the proposed restoration would result in an overall increase in Koala habitat values.

NC Act Obligations

The Subject Site is not within a high-risk area on the State's protected plants flora survey trigger mapping, and no threatened or near threatened flora species were recorded during the field survey. Accordingly, a protected plants clearing permit will not be required prior to the clearing of any native vegetation within the Subject Site.

Active animal breeding places were recorded during the field survey in the form of nests for common bird species. Under the NC Act, any clearing of vegetation that is required to tamper with a confirmed native animal breeding place in order to complete the scope of works must be undertaken in accordance with a Species Management Program (SMP) approved by DES. It is recommended all trees to be removed are inspected prior to clearing to determine if any active animal breeding places are present and any necessary SMP is obtained prior to works, as advised by DES.

State Restricted Weeds

The field survey has confirmed the presence of Category 3 restricted invasive plants on the Subject Site, which will need to be appropriately managed during onsite works to ensure they are not spread within or outside of the Subject Site.

Local Considerations

Concept designs provided to inform this assessment indicate no portion of an area mapped as MLES under the Environmental Significance Overlay of the Redland City Plan would be cleared as a result of the development. If any clearing or tree loss occurs within the mapped area the proposed development will need to comply with the Performance Outcomes of the Environmental Significance Overlay Code. The proposed development is expected to comply with the objectives of the Environmental Significance Overlay Code.

Conclusions and Recommendations

No significant impacts on MNES are expected as a result of the proposed development, and a referral to the Commonwealth is not considered necessary.

The proposed roadway will not result in any clearing of State-mapped regulated vegetation, and any interference with Koala habitat is likely to be in accordance with applicable exemptions under the Queensland Planning framework. Avoidance through design has been achieved and the amount of clearing proposed is unlikely to have any significant residual impact.

The proposed development is expected to comply with the objectives of the Environmental Significance Overlay Code under the Redland City Plan.

The following recommendations are designed to minimise the impacts on habitat values as a result of the proposed development:

- Preparation of an Arborists report to assess the potential for impacts of the retaining wall on adjacent trees, with recommendations for treatments to minimise the risk of tree death where root zones are affected.
- To improve habitat values and replace the cleared trees, the area shown as the 'Recommended restoration area' on Figure 3.1 should be revegetated with locally endemic flora species reflective of vegetation within the adjacent Conservation Area;
- Design and install fauna guide fencing adjacent to the western 1 ha of habitat to tie in with existing guide fencing for the Hilliards Creek fauna underpass beneath Finucane Road.
- Any unavoidable clearing of habitat is to be undertaken in accordance with the requirements of the Queensland Nature Conservation (Koala) Conservation Plan 2017, including the sequential clearing conditions outlined in Section 10, and the Koala spotter requirements outlined in Section 11.
- All trees to be removed be inspected prior to clearing to determine if any active animal breeding places are present and any necessary SMP is obtained prior to works, as advised by DES.

ECOLOGICAL ASSESSMENT

58-68 DELANCEY STREET, ORMISTON

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Table of Terms and Abbreviations

BAAM Biodiversity Assessment and Management Pty Ltd

DBH Diameter at Breast Height

DCCEEW Commonwealth Department of Climate Change, Energy, the Environment and Water

DES Queensland Department of Environment and Science

EPBC Act Commonwealth Environment Protection and Biodiversity Conservation Act 1999

EVNT endangered, vulnerable or near threatened
MLES Matters of Local Environmental Significance
MNES Matters of National Environmental Significance
MSES Matters of State Environmental Significance
NC Act Queensland Nature Conservation Act 1992

NJKHT non-juvenile Koala habitat tree

RCC Redland City Council

SMP Species Management Program
TEC Threatened Ecological Community

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1.0 INTRODUCTION

This report has been prepared for The Hub Precinct Pty Ltd to document the results of an ecological assessment over land proposed for a Private Hospital Development on Lots 0/SP308738, 0–2/SP308739; 0/SP308740; 4/SP308740; 10–16/SP314782, located at 58-68 Delancey Street, Ormiston (the 'Subject Site') (**Figure 1.1**) and has been undertaken to inform an application to the State Government for the project to be declared a Ministerial Infrastructure designation (MID) under Section 36 of the *Planning Act 2016*.

The 5.2 ha property is located on the corner of Finucane Road and Delancey Street and is currently used for carparking and agricultural purposes. The western 1 ha of the property supports a 0.2 ha dam surrounded by paperbarks and woodland tree species adjoining the Finucane Road Bushland Reserve. The Reserve is a component of a series of extensive, publicly owned reserves associated with Hilliards Creek, connecting bushland habitats of Capalaba, Sheldon, Alexandra Hills, Cleveland and Ormiston with coastal habitats of Wellington Point.

The scope of the assessment includes:

- A description of currently recognised ecological values, based on the desktop review;
- A description of the vegetation communities, waterways/wetlands and associated terrestrial flora and fauna habitats recorded during the field survey, including an assessment of the accuracy of current State and Local mapping;
- An account of any conservation significant flora and/or fauna species known or considered likely to occur within the Subject Site and/or adjacent areas that may be indirectly affected;
- Identification and mapping of all Koala habitat trees, animal breeding places and other notable ecological features within or immediately adjacent to the Subject Site;
- An overview of potential impacts to the identified values (focusing on MNES, MSES and MLES) and recommendations for their avoidance or mitigation (if required) to meet relevant legislative requirements, including appropriate design considerations and management of retained habitats.

Requirement for referral of the project to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) has also been considered based on the survey results.

2.0 METHODOLOGIES

2.1 DESKTOP METHODS

Desktop review comprised a search of online mapping and databases and an analysis of information for conservation significant vegetation communities and flora and fauna species with reference to the Subject Site locality. Information reviewed included:

- Commonwealth EPBC Protected Matters Search Tool - to identify any matters of national environmental significance (MNES) protected under the EPBC Act that may occur within the Subject Site (Appendix 1).
- Queensland Wildlife Online database to identify endangered, vulnerable or near threatened (EVNT) species previously recorded in habitats in and surrounding the Subject Site (Appendix 1).
- State mapping to identify matters of state environmental significance (MSES) currently recognised as occurring within the Subject Site (Appendix 2).
- Redland City Council Planning Scheme overlay mapping - to identify matters of local environmental significance (MLES) over the Subject Site (Appendix 3).

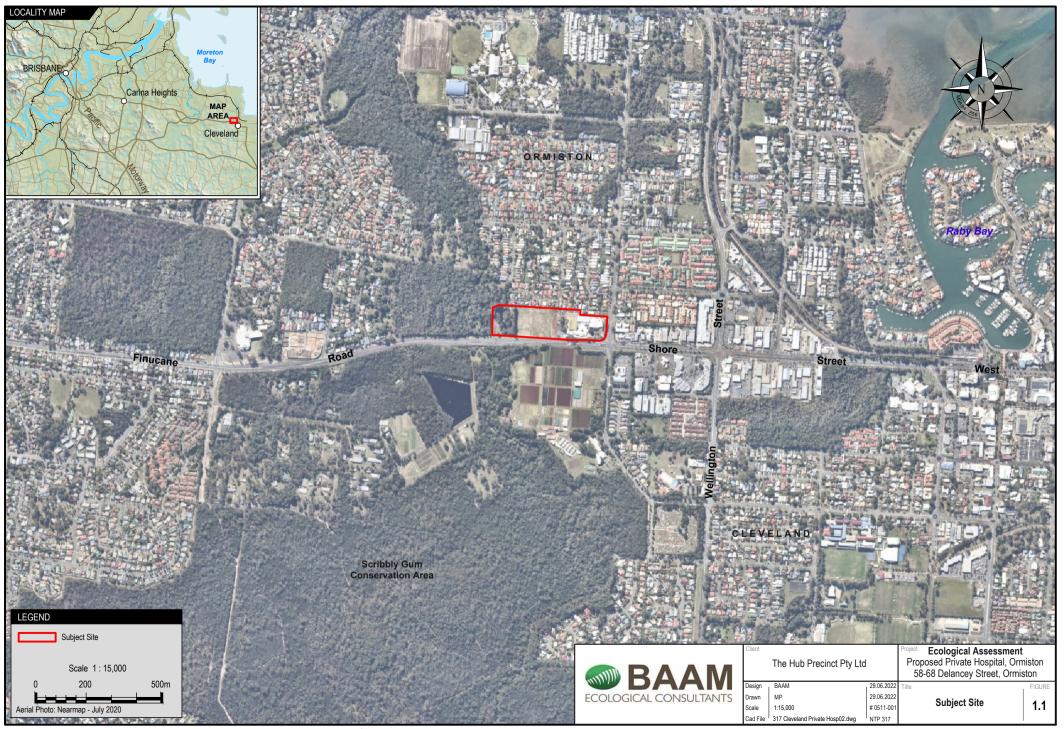
An assessment of the likelihood of occurrence MNES, MSES and MLES species guided the field survey focus.

2.2 FIELD SURVEY METHODS

Field survey was carried out on 4 September 2020 during warm, dry conditions. The small size of the area supporting potential habitat for important species (1 ha) allowed a full traverse of habitats present, and focused on:

- Describing the vegetation/habitat types present;
- Assessment of the potential for the habitats to provide resources for a range of conservation significant species identified from desktop results;

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- Searches for the presence of conservation significant species where habitat was present;
- Identification of animal breeding places;
- Quantification of resources for Koala and Grey-headed Flying-fox, including plotting of non-juvenile Koala habitat trees1 (NJKHTs); and
- Verification of State and Local government mapping of ecological values.

All fieldwork was performed in accordance with BAAM's Scientific Purposes Permit and Animal Ethics Approval.

3.0 ASSESSMENT RESULTS

3.1 PREVIOUS LAND USE

Historical aerial imagery indicates the site has been used for agricultural purposes since at least 1951, when it was completely cleared, although the 1951 imagery is at a scale too large to provide here with clarity. The following images show the gradual regrowth of native vegetation in the western portion of the site since 1965. The row of trees present along the eastern edge of the western portion appears to have been planted between 1993 and 2000, appearing to be very young in 2000 and maturing considerably in the 21 years to 2021. Field assessment revealed these planted trees are mostly Eucalyptus tereticornis with occasional E. microcorys and Corymbia intermedia. Paperbarks fringing the dam appear to have been colonising this location since at least 1973.

The remainder of the site has seen the construction of a significant building – formerly occupied by Rural Press and now occupied by a range of service industries, including health services. The central portion of the property is still in use for cropping purposes and horses are grazed in the western portion around the dam.



2021 aerial image. Source: Qld Globe



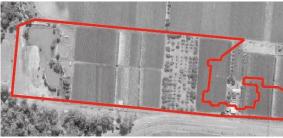
2000 aerial image: Source: Qlmagery



1993 aerial image. Source: Qlmagery



1973 aerial image. Source: QImagery



1965 aerial image. Source: Qlmagery

a circumference of more than 31.5cm at 1.3m above the ground.

¹ A Koala habitat tree (i.e. a food tree of the *Corymbia*, *Melaleuca*, *Lophostemon* or *Eucalyptus* genera, or a preferred shelter species such as *Angophora* genera) which has a height of more than 4m, and/or a trunk with



3.2 GENERAL ECOLOGICAL VALUES

3.2.1 Vegetation

Habitat values for native flora and fauna were restricted to the western-most 1 ha of the site (Figure 1.1). This area comprised stands of Broad-leaved Paperbark *Melaleuca quinquenervia* surrounding a large dam (Photos 1 and 2), grading to a community representative of the pre-clear RE 12.3.6 – which is an open forest of *M. quinquenervia* with *Eucalyptus tereticornis*, *Lophostemon suavelons* and *Corymbia intermedia*. Also present were occasional *E. microcorys*, *Lophostemon confertus*, *Melaleuca nodosa*, *Corymbia citriodora* and one *E. crebra* (see Figure 3.1 and tree species list at Appendix 4).



Photo 1. *Melaleuca quinquenervia* on edge of dam.



Photo 2. Vegetation on the eastern edge of the dam. Note the line of trees on the right are those to be removed by the road.

Due to the presence of the climbing vine Parsonsia straminea (Monkey Rope) which can smother trees, many of the melaleucas surrounding the dam were dead and several more were recorded as being in poor health. Vegetation disturbance and lack of fire tends to encourage proliferation of this native vine to the detriment of canopy species. The remaining vegetation was relatively intact and of good health.

The shrub layer and ground cover were sparse, most likely a result of grazing by resident horses, while the dam bank primarily consisted of bare mud with no vegetation and noticeable damage from horses.

Weed species dominated the ground cover throughout the western area, particularly Blue Billy Goat weed *Ageratum houstonianum*. Other weeds present included Lantana *Lantana camara*, White Passionflower *Passiflora subpeltata*, and Devils Fig *Solanum chrysotrichum*.

The south-western corner of the Lot comprised previously cleared land (**Photo 4**, **Figure 3.1**).



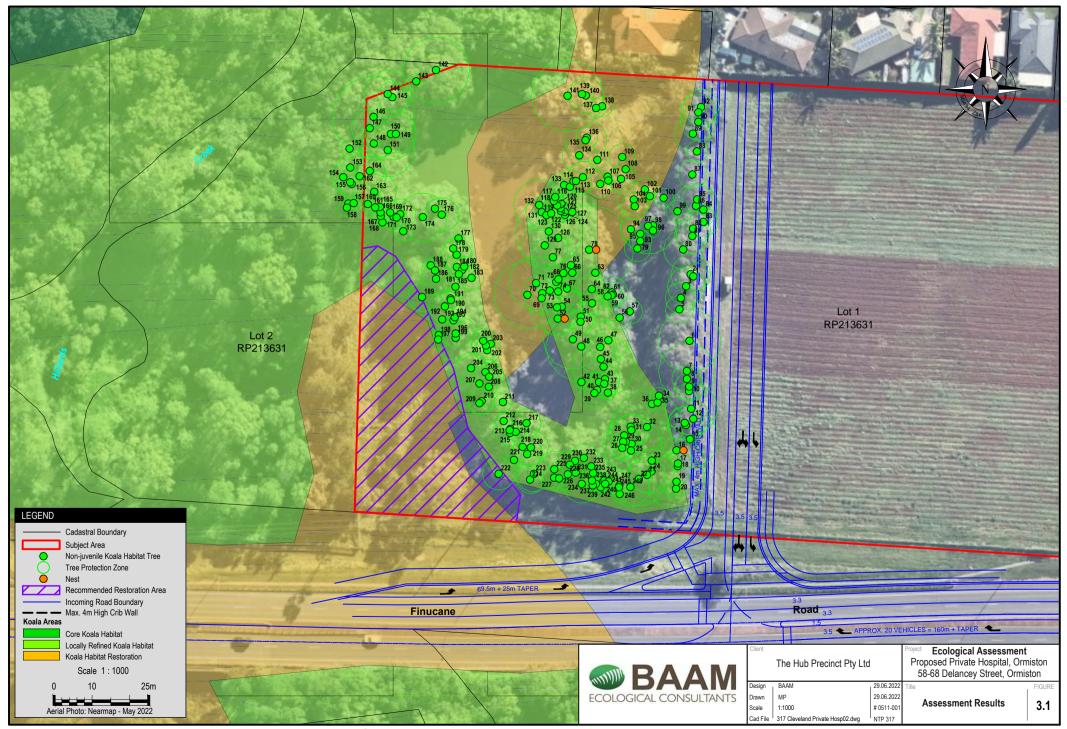
Photo 4. previously cleared, south-western portion of the Subject Site.

3.2.2 Fauna and Fauna Habitats

The native vegetation on site included a range of Koala habitat tree species, and some large trees with small hollows suitable for frogs, reptiles, small mammals and small birds. Fallen debris and deep leaf litter beneath the trees provided habitats for small mammals, reptiles and frogs.

Bird diversity recorded during the survey was typical of an urban area in this location and comprised locally common species.

The dam provided habitat for locally common frog species, such as Dwarf Eastern Sedgefrog *Litoria fallax*, which was heard calling during the survey, but lacks the complexity of aquatic plants and bank vegetation to provide habitat for a wide range of frog species.



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3.2.3 Wildlife Movement

There were no barriers to fauna movement within the property, although the cleared agricultural land, buildings and edges of Finucane Road would not be suitable for forest-dwelling species. The western-most portion of the Subject Site supports native trees and aquatic habitats and is connected to a large, vegetated corridor associated with Hilliards Creek and the Scribbly Gum Conservation Area (Figure 1.1). Adjacent to the Subject Site there is a dedicated fauna underpass associated with Hilliards Creek where it intersects Finucane Road. Guide fencing for the underpass reaches the western boundary of the Subject Site.

3.3 MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE (MNES)

3.3.1 Threatened Ecological Communities

The EPBC Protected Matters Search (**Appendix 1**) indicates two EPBC listed Threatened Ecological Communities (TECs) could potentially occur onsite, these being:

- Lowland Rainforest of Subtropical Australia (EPBC Act: Critically Endangered);
- Coastal Swamp Oak (Casuarina glauca)
 Forest of New South Wales and South East
 Queensland ecological community
- Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland (EPBC Act: Endangered).

No vegetation communities with species indicative of the Lowland Rainforest or Coastal Swamp Oak TECs were identified on State vegetation mapping and no species characteristic of these TECs were identified during the field survey, confirming that these TECs do not occur within the Subject Site.

The melaleuca dominated habitats associated with the existing dam align with the Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland TEC.

This area is completely avoided by the proposed roadway and provided no significant changes to hydrology results from the proposed roadway no impacts are expected.

The 'Recommended restoration area' on **Figure 3.1** should be revegetated with locally endemic

flora species reflective of vegetation within the adjacent Conservation Area, which also reflects the TEC and would result in an overall increase in the TEC.

Consequently, it is considered that a referral to the Commonwealth for impacts on TECs is not warranted.

3.3.2 Threatened Species

Flora

The field survey did not record any threatened flora species within the Subject Site. Available habitat for native flora was restricted to the western 1 ha of the property, and this area showed evidence of past and current disturbance, particularly grazing and weed invasion. It was not found to provide suitable habitat for any of the species listed as potentially occurring on site from the EPBC Protected Matter Search Tool results (Appendix 1). No EPBC listed threatened flora species are expected to occur, and it is considered that a referral to the Commonwealth for impacts on threatened flora species is not warranted.

Fauna

Two fauna species listed under the EPBC Act (Koala and Grey-headed Flying-fox) are likely to occur within the vegetated western portion of the Subject Site. No other threatened fauna species were recorded during the survey, and no other threatened species are expected to utilise the Subject Site based on known range and habitat preferences and the types and conditions of the habitats recorded (see **Appendix 5**).

Koala *Phascolarctos cinereus* (Endangered under the EPBC Act)

Koalas and evidence of Koalas were the subject of targeted searches. No Koalas or evidence of their presence was found during the site survey; however, the species is well known from the local area and is expected to occasionally occupy or traverse through the site. There are suitable foraging resources present.

The results of a habitat assessment performed in accordance with the EPBC Act referral guidelines for Koala habitat assessment tool (DoE 2014), prior to the uplifting of Koala to Endangered, provided a habitat score >5.



Habitat with this score was recognised as 'habitat critical to the survival of Koala' under the prior EPBC Act. There are no specific guidelines for determining the significance of Koala habitats under the Endangered listing; however, the location of the vegetation adjacent to habitat within Reserves associated with Hilliards Creek, the inclusion of the vegetation in locally refined Koala mapping (see **Section 3.4.2**), and the presence of Koala food trees indicates the western, vegetated portion of the site represents habitat critical to the survival of Koala.

The concept designs provided to inform this assessment indicate the eastern edge of the Koala habitat will be impacted by the construction of a retaining wall (**Figure 3.1**).

Given the absence of evidence of visitation and the trees identified for removal do not constitute primary food trees there is unlikely any significant impact. The recommended restoration in the south -western portions of the site will result in an overall net increase in koala habitat.

Grey-headed Flying-fox *Pteropus* poliocephalus

(Vulnerable under the EPBC Act)

Grey-headed Flying-fox are known to roost within 2 km of the Subject Site, and it is considered likely that the species would visit the western portions of the Subject Site seasonally in response to flowering events.

Under the EPBC Act, an action is likely to have a significant impact on a vulnerable species if there is a real chance or possibility that it will:

- lead to a long-term decrease in the size of an important population of a species;
- reduce the area of occupancy of an important population;
- fragment an existing important population into two or more populations;
- adversely affect habitat critical to the survival of a species;
- 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;
- result in invasive species that are harmful to a vulnerable species becoming

- established in the vulnerable species' habitat:
- introduce disease that may cause the species to decline; or
- interfere substantially with the recovery of the species (DoE, 2013).

No flying-fox camp was found to be present on the subject site, and therefore any impacts on the vegetation of the site are unlikely to affect the breeding cycles of an important population of the species.

In accordance with the National Recovery Plan for Grey-headed Flying-fox (DAWE 2021), the winter and spring flowering vegetation communities on the Subject Site represent critical habitat for Grey-headed Flying-fox. Approximately 23 trees would be directly impacted within the footprint of a 4 m high retaining wall on the edge of the vegetated area (19 x E. tereticornis, 2 x E. microcorys, 1 x E. intermedia, 1 x E. crebra) and a further nine trees may be impacted over time by the presence of the adjacent retaining wall (4 x E. tereticornis, 4 x C. intermedia, 1 x E. microcorys) due to the wall impinging on the root zones of these trees. Communities with E. tereticornis and E. crebra are specifically listed by DAWE (2021) as providing critical habitat for Grey-headed Flying-fox.

The potential for impacts to the trees that would remain adjacent to the retaining wall would need to be assessed by a qualified Arborist.

The loss of 20, and possibly a further four trees that provide critical feeding resources for Grey-headed Flying-fox is not considered likely to lead to a long term decrease in an important population of the species, have a significant impact on species survival, reduce the area of occupancy of an important population, introduce disease or interfere substantially with the recovery of the species.

Overall, it is considered that a referral to the Commonwealth for impacts on threatened fauna species is not warranted.

3.3.3 Migratory Species

Database searches (**Appendix 1**) indicate the potential presence of EPBC Act listed migratory species, a number of which have potential to be seasonal visitors to the Subject Site. However, the Subject Site would not



Consequently, a protected plants clearing permit will not be required prior to the removal of native vegetation from the Subject Site.

Animal Breeding Places

Three active animal breeding places were recorded during the field survey, including a termitarium containing an active Laughing Kookaburra *Dacelo novaeguineae* nest (**Photo 5**), and two stick nests with breeding Olivebacked Orioles *Oriolus sagittatus* and Noisy Miners *Manorina melanocephala*.



Photo 5. active kookaburra nest in an arboreal termitarium.

Under the NC Act, any clearing of vegetation that is required to tamper with a confirmed native animal breeding place in order to complete the scope of works must be undertaken in accordance with a Species Management Program (SMP) approved by DES.

DES provides two SMP templates, depending on the identified protected animals. The SMP "low risk of impacts" relates to protected animals classed as Least Concern under NC Act where the impacts are unlikely to affect broader population. The SMP "high risk of impacts" relates to protected animals identified as EVNT, Special Least Concern or Least Concern Colonial Breeder species, where the broader population is at a greater risk from impacts.

The findings of the field survey indicate there are unlikely to be breeding places for EVNT species present within the Subject Site, although breeding places for Least Concern

Matters Addressed under the *Biosecurity Act 2014*

Weed species listed as Category 3 restricted invasive plants under the Queensland *Biosecurity Act 2014* recorded on the Subject Site included Lantana, which occurred occasionally within the vegetated portion of the Subject Site.

In accordance with the *Biosecurity Act 2014*, Category 3 restricted invasive plants must not be distributed (i.e. released into the environment) unless the distribution or disposal is authorised in a regulation or under a permit. More generally, landowners are responsible for taking all reasonable and practical steps to minimise the risks associated with invasive plants under their control.

3.6 LOCAL GOVERNMENT MATTERS

The Subject Site is zoned as Low Impact Industry in the eastern portion and Recreation and Open Space under the Redland City Plan 2018, V6 (City Plan).

Under the Environmental Significance Overlay, the western, vegetated portion of the Subject Site is partially mapped as MSES² and partially mapped as MLES (**Appendix 3**). The northwestern corner of the Subject Site is also mapped under the Waterway Corridors and Wetlands Overlay.

Concept designs provided to inform this assessment indicate a portion of the area mapped as MLES under the Environmental Significance Overlay may be cleared for the construction of a retaining wall, in which case the proposed designation will need to comply with the Performance Outcomes (PO 1) of the Environmental Significance Overlay Code. The purpose of this code is to manage

updated and replaced by the mapping of Koala Habitat – Locally refined (**Figure 3.1**). The implications of this mapping are discussed in **Section 4.2**.

species such as nesting birds may be present during clearing, subject to the timing of works. It is recommended all trees to be removed are inspected prior to clearing to determine if any active animal breeding places are present and any necessary SMP is obtained prior to works, as advised by DES.

² Online mapping from the State Government indicates the "MSES" overlay is based on the State's former (now superseded) mapping of Koala bushland habitat under the South East Queensland Koala Conservation State Planning Regulatory Provisions, which has since been



development to avoid or minimise and mitigate significant impacts on matters of national, state and local environmental significance. Key considerations are that the development should not:

- result in a significant reduction in the level or condition of biodiversity and ecological functions and processes in the locality;
- cause substantial fragmentation of habitat areas; or
- disrupt connections between habitat areas or inhibit the movement of key species.

Concept designs provided to inform this assessment indicate that the proposed designation is unlikely to result in such impacts.

When considered in conjunction with the proposed restoration activities in the western portion of the site there would be an overall increase in fauna habitat values.

4.0 CONCLUSIONS AND RECOMMENDATIONS

No significant impacts on MNES are expected as a result of the proposed development, and a referral to the Commonwealth is not considered necessary.

The proposed designation will not result in any clearing of State-mapped regulated vegetation, and any interference with Koala habitat is likely to be in accordance with applicable exemptions under the Queensland Planning framework. Avoidance through design has been achieved and the amount of clearing proposed is unlikely to have any significant residual impact.

The proposed development is expected to comply with the objectives of the Environmental Significance Overlay Code under the Redland City Plan.

The following recommendations are designed to minimise the impacts on habitat values as a result of the Ministerial Infrastructure Designation:

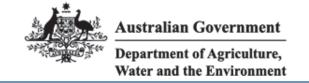
 Preparation of an Arborists report to assess the potential for impacts of the retaining wall on adjacent trees, with recommendations for treatments to minimise the risk of tree death where root zones are affected.

- To improve habitat values and replace the cleared trees, the area shown as the 'Recommended restoration area' on Figure 3.1 should be revegetated with locally endemic flora species reflective of vegetation within the adjacent Conservation Area and reflective of the Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland TEC;
- Design and install fauna guide fencing adjacent to the western 1 ha of habitat to tie in with existing guide fencing for the Hilliards Creek fauna underpass beneath Finucane Road.
- Any unavoidable clearing of habitat is to be undertaken in accordance with the requirements of the Queensland Nature Conservation (Koala) Conservation Plan 2017, including the sequential clearing conditions outlined in Section 10, and the Koala spotter requirements outlined in Section 11.
- All trees to be removed are to be inspected prior to clearing to determine if any active animal breeding places are present and any necessary SMP is obtained prior to works, as advised by DES.

5.0 REFERENCES

DAWE (2021). National Recovery Plan for the Grey-headed Flying-fox Pteropus poliocephalus. Department of Agriculture, Water and the Environment, Commonwealth of Australia 2021.

APPENDIX 1 Database Search Results



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.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about <u>Environment Assessments</u> and the EPBC Act including significance guidelines, forms and application process details.

Report created: 08/07/22 08:42:02

Summary

Details

Matters of NES
Other Matters Protected by the EPBC Act
Extra Information

Caveat

<u>Acknowledgements</u>



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2015

Coordinates
Buffer: 1.0Km



Summary

Matters of National Environmental 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 <u>Administrative Guidelines on Significance</u>.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	3
<u>Listed Threatened Species:</u>	41
<u>Listed Migratory Species:</u>	19

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 http://www.environment.gov.au/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 Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	25
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

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

State and Territory Reserves:	1
Regional Forest Agreements:	None
Invasive Species:	34
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

<u>Hirundapus caudacutus</u> White-throated Needletail [682]

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar)	[Resource Information]
Name	Proximity
Moreton bay	Within 10km of Ramsar

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. Name Status Type of Presence Coastal Swamp Oak (Casuarina glauca) Forest of New Endangered Community may occur South Wales and South East Queensland ecological within area community Coastal Swamp Sclerophyll Forest of New South Endangered Community known to occur Wales and South East Queensland within area Lowland Rainforest of Subtropical Australia Critically Endangered Community may occur within area [Resource Information] Listed Threatened Species Name Status Type of Presence Birds Anthochaera phrygia Regent Honeyeater [82338] Critically Endangered Foraging, feeding or related behaviour likely to occur within area Botaurus poiciloptilus Australasian Bittern [1001] Endangered Species or species habitat likely to occur within area Calidris canutus Red Knot, Knot [855] Endangered Species or species habitat may occur within area Calidris ferruginea Curlew Sandpiper [856] Critically Endangered Species or species habitat may occur within area Cyclopsitta diophthalma coxeni Coxen's Fig-Parrot [59714] Species or species habitat Endangered may occur within area Erythrotriorchis radiatus Vulnerable Red Goshawk [942] Species or species habitat likely to occur within area Falco hypoleucos Grey Falcon [929] Vulnerable Species or species habitat likely to occur within area Grantiella picta Painted Honeyeater [470] Vulnerable Species or species habitat may occur within area

Vulnerable

Species or species habitat

known to occur within area

Name	Status	Type of Presence
<u>Lathamus discolor</u>		
Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area
Limosa lapponica baueri		
Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Vulnerable	Species or species habitat known to occur within area
Numenius madagascariensis		
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur subantarctica		
Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area
Rostratula australis		
Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area
Sternula nereis nereis		
Australian Fairy Tern [82950]	Vulnerable	Species or species habitat may occur within area
Turnix melanogaster		
Black-breasted Button-quail [923]	Vulnerable	Species or species habitat may occur within area
Insects		
Argynnis hyperbius inconstans		
Australian Fritillary [88056]	Critically Endangered	Species or species habitat may occur within area
Mammals		
Chalinolobus dwyeri		
Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat may occur within area
Dasyurus maculatus maculatus (SE mainland population	<u>on)</u>	
Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat likely to occur within area
Macroderma gigas		
Ghost Bat [174]	Vulnerable	Species or species habitat may occur within area
Petauroides volans		
Greater Glider (southern and central) [254]	Endangered	Species or species habitat likely to occur within area
Petaurus australis australis		
Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat may occur within area
Phascolarctos cinereus (combined populations of Qld, 1	· · · · · · · · · · · · · · · · · · ·	
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat known to occur within area
Potorous tridactylus tridactylus		
Long-nosed Potoroo (northern) [66645]	Vulnerable	Species or species habitat may occur within area
Pteropus poliocephalus		
Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Xeromys myoides Water Mouse, False Water Rat, Yirrkoo [66]	Vulnerable	Species or species habitat likely to occur within area
Dianto		
Plants Acronychia littoralis		
Scented Acronychia [8582]	Endangered	Species or species

Name	Status	Type of Presence
Arthraxon hispidus		habitat may occur within area
Hairy-joint Grass [9338]	Vulnerable	Species or species habitat likely to occur within area
Baloghia marmorata Marbled Balogia, Jointed Baloghia [8463]	Vulnerable	Species or species habitat may occur within area
Bosistoa transversa Three-leaved Bosistoa, Yellow Satinheart [16091]	Vulnerable	Species or species habitat may occur within area
Cryptocarya foetida Stinking Cryptocarya, Stinking Laurel [11976]	Vulnerable	Species or species habitat may occur within area
Cryptostylis hunteriana Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat may occur within area
<u>Cupaniopsis shirleyana</u> Wedge-leaf Tuckeroo [3205]	Vulnerable	Species or species habitat may occur within area
Endiandra floydii Floyd's Walnut, Crystal Creek Walnut [52955]	Endangered	Species or species habitat may occur within area
Phaius australis Lesser Swamp-orchid [5872]	Endangered	Species or species habitat likely to occur within area
Rhodamnia rubescens Scrub Turpentine, Brown Malletwood [15763]	Critically Endangered	Species or species habitat likely to occur within area
Rhodomyrtus psidioides Native Guava [19162]	Critically Endangered	Species or species habitat likely to occur within area
Samadera bidwillii Quassia [29708]	Vulnerable	Species or species habitat likely to occur within area
<u>Thesium australe</u> Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat may occur within area
Reptiles		
Coeranoscincus reticulatus Three-toed Snake-tooth Skink [59628]	Vulnerable	Species or species habitat may occur within area
<u>Delma torquata</u> Adorned Delma, Collared Delma [1656]	Vulnerable	Species or species habitat may occur within area
Listed Migratory Species * Species is listed under a different scientific name on		-
Name Migratory Marine Rirds	Threatened	Type of Presence
Migratory Marine Birds Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Species or species habitat likely to occur within area
Migratory Torroctrial Species		

Migratory Terrestrial Species

Name	Threatened	Type of Presence
Cuculus optatus		0
Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area
<u>Hirundapus caudacutus</u>		
White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area
Monarcha melanopsis		
Black-faced Monarch [609]		Species or species habitat known to occur within area
Monarcha trivirgatus		
Spectacled Monarch [610]		Species or species habitat likely to occur within area
Myiagra cyanoleuca		
Satin Flycatcher [612]		Species or species habitat known to occur within area
Rhipidura rufifrons		
Rufous Fantail [592]		Species or species habitat likely to occur within area
Migratory Wetlands Species		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata		
Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
<u>Calidris canutus</u>		
Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
<u>Calidris melanotos</u>		
Pectoral Sandpiper [858]		Species or species habitat may occur within area
Gallinago hardwickii		
Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area
<u>Limnodromus semipalmatus</u>		
Asian Dowitcher [843]		Species or species habitat may occur within area
Limosa lapponica		
Bar-tailed Godwit [844]		Species or species habitat known to occur within area
Numenius madagascariensis		
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus		
Osprey [952]		Breeding known to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat
, 2		likely to occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species * Species is listed under a different scientific name on t	he FPBC Act - Threatened	[Resource Information]
Name	Threatened	Type of Presence
Birds		. , , , , , , , , , , , , , , , , , , ,
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat may occur within area
Anseranas semipalmata		
Magpie Goose [978]		Species or species habitat may occur within area
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea ibis		
Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata		
Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
<u>Calidris canutus</u>		
Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos		
Pectoral Sandpiper [858]		Species or species habitat may occur within area
Gallinago hardwickii		
Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area
Haliaeetus leucogaster		
White-bellied Sea-Eagle [943]		Species or species habitat
		known to occur within area
<u>Hirundapus caudacutus</u>		
White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area
<u>Lathamus discolor</u>		
Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area
<u>Limnodromus semipalmatus</u>		
Asian Dowitcher [843]		Species or species habitat may occur within area
Limosa lapponica		
Bar-tailed Godwit [844]		Species or species habitat known to occur within area
Merops ornatus		
Rainbow Bee-eater [670]		Species or species habitat may occur within area
Monarcha melanopsis		
Black-faced Monarch [609]		Species or species habitat known to occur

Name	Threatened	Type of Presence
		within area
Monarcha trivirgatus Spectacled Monarch [610]		Species or species habitat likely to occur within area
Myiagra cyanoleuca		
Satin Flycatcher [612]		Species or species habitat known to occur within area
Numenius madagascariensis		
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur		
Fairy Prion [1066]		Species or species habitat likely to occur within area
Pandion haliaetus		
Osprey [952]		Breeding known to occur within area
Puffinus carneipes		
Flesh-footed Shearwater, Fleshy-footed Shearwater [1043]		Species or species habitat likely to occur within area
Rhipidura rufifrons		
Rufous Fantail [592]		Species or species habitat likely to occur within area
Rostratula benghalensis (sensu lato)		
Painted Snipe [889]	Endangered*	Species or species habitat known to occur within area
Tringa nebularia		
Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area

Extra Information

State and Territory Reserves	[Resource Information]
Name	State
Dawson Road	QLD
Invasive Species	[Resource Information]
Weeds reported here are the 20 species of national signification that are considered by the States and Territories to pose a following feral animals are reported: Goat, Red Fox, Cat, Fox Landscape Health Project, National Land and Water Resonant	particularly significant threat to biodiversity. The Rabbit, Pig, Water Buffalo and Cane Toad. Maps from

Name	Status	Type of Presence
Birds		
Acridotheres tristis		
Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Anas platyrhynchos		
Mallard, Northern Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis		
European Goldfinch [403]		Species or species

Name	Status	Type of Presence
Columba livia		habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Lonchura punctulata Nutmeg Mannikin [399]		Species or species habitat likely to occur within area
Passer domesticus House Sparrow [405]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove, Spotted Dove [780]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Frogs		
Rhinella marina Cane Toad [83218]		Species or species habitat known to occur within area
Mammals		
Bos taurus		
Domestic Cattle [16]		Species or species habitat likely to occur within area
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Lepus capensis Brown Hare [127]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Rattus norvegicus Brown Rat, Norway Rat [83]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Alternanthera philoxeroides		

Alternanthera philoxeroides Alligator Weed [11620]

Species or species habitat likely to occur within area

Name	Status	Type of Presence
Anredera cordifolia		
Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643] Cabomba caroliniana		Species or species habitat likely to occur within area
Cabomba, Fanwort, Carolina Watershield, Fish Grass Washington Grass, Watershield, Carolina Fanwort, Common Cabomba [5171] Chrysanthemoides monilifera	5,	Species or species habitat likely to occur within area
Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Chrysanthemoides monilifera subsp. rotundata		
Bitou Bush [16332]		Species or species habitat likely to occur within area
Cryptostegia grandiflora		
Rubber Vine, Rubbervine, India Rubber Vine, India Rubbervine, Palay Rubbervine, Purple Allamanda [18913] Hymenachne amplexicaulis		Species or species habitat likely to occur within area
Hymenachne, Olive Hymenachne, Water Stargrass, West Indian Grass, West Indian Marsh Grass [31754]	Species or species habitat likely to occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large-		Species or species habitat
leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sag [10892] Parthenium hysterophorus		likely to occur within area
Parthenium Weed, Bitter Weed, Carrot Grass, False Ragweed [19566]		Species or species habitat likely to occur within area
Sagittaria platyphylla		
Delta Arrowhead, Arrowhead, Slender Arrowhead [68483]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.	x reichardtii	
Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]	a	Species or species habitat likely to occur within area
Senecio madagascariensis Fireweed, Madagascar Ragwort, Madagascar Groundsel [2624]		Species or species habitat likely to occur within area
		incly to occur within area
Reptiles		
Hemidactylus frenatus Asian House Gecko [1708]		Species or species habitat likely to occur within area
Ramphotyphlops braminus Flowerpot Blind Snake, Brahminy Blind Snake, Cacin Besi [1258]	g	Species or species habitat likely to occur within area

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

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.

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

Where very little information is available for 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 reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

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

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

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

Coordinates

-27.5231 153.2467

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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WildNet Records Species List



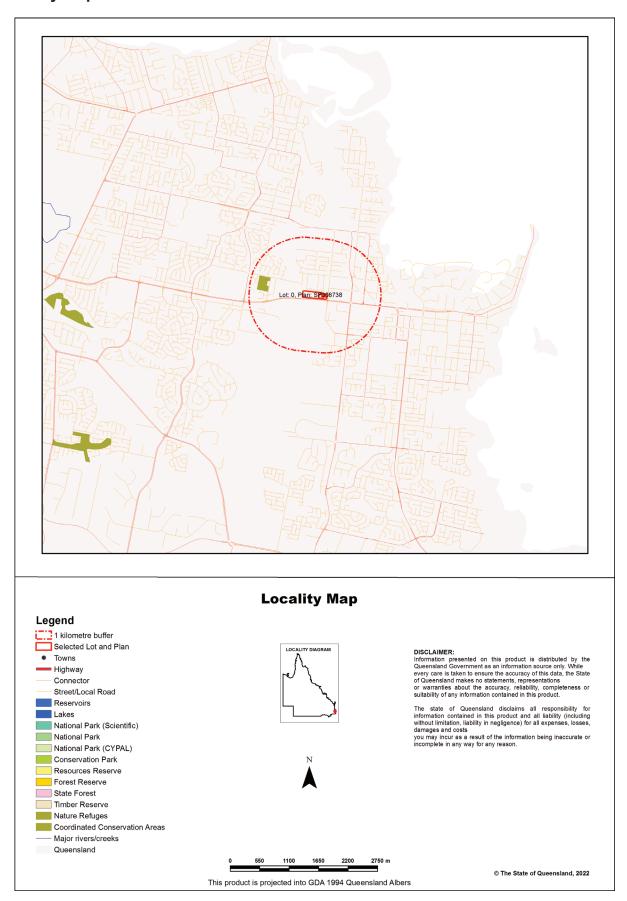
For the selected area of interest 4.54ha Lot: 0 Plan: SP308738

Current as at 07/07/2022

WildNetSpeciesList



Map 1. Locality Map



Summary Information

The following table provides an overview of the area of interest Lot: 0 Plan: SP308738.

Table 1. Area of interest details

Size (ha)	4.54
Local Government(s)	Redland City
Bioregion(s)	Southeast Queensland
Subregion(s)	Sunshine Coast - Gold Coast Lowlands
Catchment(s)	Logan-Albert

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.

Species List

Introduction

This report is derived from a spatial layer generated from the <u>WildNet database</u> managed by the Department of Environment and Science. The layer which is generated weekly contains the 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.

The WildNet dataset is constantly being enhanced and the taxonomic and status information revised. If a 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 (Refer Links and Support).

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

Table 3 lists the plants recorded within the area of interest and its one kilometre buffer.

Table 4 lists the fungi recorded within the area of interest and its one kilometre buffer.

Table 5 lists the other species recorded within the area of interest and its one kilometre buffer.

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

Taxon Id	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
26908	Actinopterygii	Anguillidae	Anguilla australis	southern shortfin eel	None	None	0	13	14/04/2014
26910	Actinopterygii	Anguillidae	Anguilla reinhardtii	longfin eel	None	None	0	26	14/04/2014
26918	Actinopterygii	Atherinidae	Craterocephalu s marjoriae	silverstreak hardyhead	None	None	0	2	31/05/2003
26920	Actinopterygii	Atherinidae	Craterocephalu s stercusmuscar um	flyspecked hardyhead	None	None	0	18	15/10/2013
26938	Actinopterygii	Cichlidae	Oreochromis mossambica	Mozambique mouthbrooder	None	None	0	5	14/04/2014
26952	Actinopterygii	Eleotridae	Gobiomorphus australis	striped gudgeon	None	None	0	15	14/04/2014

Actinopterygii Eleotridae Hypseleotris compressa empire guigeon None None 0 23	
26956 Actinopterygii Electridae Hypselectris Munzingeri gudgeon None None None O 16	14/04/2014
Ritunzingeri gudgeon	11/04/2011
Actinopterygii	14/04/2014
e duboulayi rainbowfish 27035 Actinopterygii Mugliidae Mugli cephalus sea mullet None None 0 13 27054 Actinopterygii Plotosidae Tandanus freshwater catfish None None 0 26 27055 Actinopterygii Poeciliidae Gambusia mosquitofish None None 0 26 19690 Actinopterygii Poeciliidae Xiphophorus swordtail None None 0 25 19501 Actinopterygii Poeciliidae Xiphophorus platy None None 0 3 716 Amphibia Bufonidae Rhinella marina cane toad None None 0 2 627 Amphibia Hylidae Litoria caerulea common green treefrog 608 Amphibia Hylidae Litoria fallax eastern sedgefrog C None 0 1 596 Amphibia Hylidae Litoria peronii emerald spotted treefrog	02/10/2012
27054 Actinopterygii Plotosidae Tandanus freshwater catfish None None 0 26 27055 Actinopterygii Poeciliidae Gambusia holbrooki None None 0 26 19690 Actinopterygii Poeciliidae Xiphophorus swordtail None None 0 25 19501 Actinopterygii Poeciliidae Xiphophorus platy None None 0 3 19501 Actinopterygii Poeciliidae Xiphophorus platy None None 0 3 716 Amphibia Bufonidae Rhinella marina cane toad None None 0 2 627 Amphibia Hylidae Litoria caerulea common green treefrog C None 0 1 608 Amphibia Hylidae Litoria fallax eastern sedgefrog C None 0 2 596 Amphibia Hylidae Litoria peronii emerald spotted treefrog	14/04/2014
tandanus Actinopterygii Poeciliidae Gambusia holbrooki 19690 Actinopterygii Poeciliidae Xiphophorus hellerii swordtail None None 0 25 19501 Actinopterygii Poeciliidae Xiphophorus platy None None 0 3 716 Amphibia Bufonidae Rhinella marina cane toad None None 0 2 627 Amphibia Hylidae Litoria caerulea treefrog C None 0 1 608 Amphibia Hylidae Litoria fallax eastern sedgefrog C None 0 2 596 Amphibia Hylidae Litoria peronii emerald spotted treefrog	14/04/2014
holbrooki 19690 Actinopterygii Poeciliidae Xiphophorus hellerii swordtail None None 0 25 19501 Actinopterygii Poeciliidae Xiphophorus platy None None 0 3 716 Amphibia Bufonidae Rhinella marina cane toad None None 0 2 627 Amphibia Hylidae Litoria caerulea common green treefrog C None 0 1 608 Amphibia Hylidae Litoria fallax eastern sedgefrog C None 0 2 596 Amphibia Hylidae Litoria peronii emerald spotted treefrog	14/04/2014
19501 Actinopterygii Poeciliidae Xiphophorus maculatus platy None None 0 3 716 Amphibia Bufonidae Rhinella marina cane toad None None 0 2 627 Amphibia Hylidae Litoria caerulea common green treefrog C None 0 1 608 Amphibia Hylidae Litoria fallax eastern sedgefrog C None 0 2 596 Amphibia Hylidae Litoria peronii emerald spotted treefrog C None 0 1	14/04/2014
716 Amphibia Bufonidae Rhinella marina cane toad None None 0 2 627 Amphibia Hylidae Litoria caerulea treefrog C None 0 1 608 Amphibia Hylidae Litoria fallax eastern sedgefrog C None 0 2 596 Amphibia Hylidae Litoria peronii emerald spotted treefrog C None 0 1	14/04/2014
627 Amphibia Hylidae Litoria caerulea common green treefrog C None 0 1 608 Amphibia Hylidae Litoria fallax eastern sedgefrog C None 0 2 596 Amphibia Hylidae Litoria peronii emerald spotted treefrog	15/11/2004
treefrog treefrog C None 0 2 596 Amphibia Hylidae Litoria fallax eastern sedgefrog C None 0 1 Emerald spotted treefrog C None 0 1	04/09/2020
596 Amphibia Hylidae Litoria peronii emerald spotted C None 0 1 treefrog	17/11/1991
treefrog	04/09/2020
1423 Aves Acanthizidae Acanthiza brown thornbill C None 0 4	13/11/1992
pusilla pusilla	04/01/1992
1408 Aves Acanthizidae Gerygone mangrove C None 0 2	17/11/1991
1396 Aves Acanthizidae Gerygone white-throated C None 0 3	17/11/1991
1382 Aves Acanthizidae Sericomis white-browed C None 0 1 scrubwren	06/12/1987
1371 Aves Acanthizidae Smicrornis weebill C None 0 1	07/09/2007
1742 Aves Accipitridae Accipiter collared C None 0 1	20/01/1992
1729 Aves Accipitridae Accipiter brown goshawk C None 0 2	17/11/1991
1732 Aves Accipitridae Aquila audax wedge-tailed C None 0 1	07/09/2007
1721 Aves Accipitridae Aviceda Pacific baza C None 0 3	21/11/1993
1725 Aves Accipitridae <i>Elanus axillaris</i> black-shouldered C None 0 1	07/09/2007
1718 Aves Accipitridae Haliaeetus white-bellied C None 0 2	01/07/1993
1720 Aves Accipitridae Haliastur indus brahminy kite C None 0 2	01/07/1993
1707 Aves Accipitridae Haliastur whistling kite C None 0 3	17/11/1991
1702 Aves Accipitridae Pandion eastern osprey SL None 0 2	+

Taxon Id	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
1776	Aves	Alcedinidae	Ceyx azureus	azure kingfisher	С	None	0	4	17/11/1991
1992	Aves	Anatidae	Anas castanea	chestnut teal	С	None	0	4	08/03/1992
1993	Aves	Anatidae	Anas gracilis	grey teal	С	None	0	2	08/03/1992
1998	Aves	Anatidae	Anas superciliosa	Pacific black duck	С	None	0	8	04/09/2020
2003	Aves	Anatidae	Chenonetta jubata	Australian wood	С	None	0	6	04/09/2020
2005	Aves	Anatidae	Cygnus atratus	black swan	С	None	0	3	17/11/1991
1279	Aves	Anhingidae	Anhinga novaehollandiae	Australasian darter	С	None	0	1	10/09/1989
1963	Aves	Anseranatidae	Anseranas semipalmata	magpie goose	С	None	0	2	07/09/2007
1971	Aves	Apodidae	Hirundapus caudacutus	white-throated needletail	V	V	0	3	07/09/2007
1829	Aves	Ardeidae	Ardea alba modesta	eastern great egret	С	None	0	2	17/11/1991
1831	Aves	Ardeidae	Ardea intermedia	intermediate egret	С	None	0	2	17/11/1991
1830	Aves	Ardeidae	Bubulcus ibis	cattle egret	С	None	0	7	04/09/2020
1839	Aves	Ardeidae	Butorides striata	striated heron	С	None	0	1	01/07/1993
1840	Aves	Ardeidae	Egretta garzetta	little egret	С	None	0	5	04/01/1992
1826	Aves	Ardeidae	Egretta novaehollandiae	white-faced heron	С	None	0	4	01/07/1993
1818	Aves	Ardeidae	Nycticorax caledonicus	nankeen night-heron	С	None	0	3	17/11/1991
1660	Aves	Artamidae	Artamus leucorynchus	white-breasted woodswallow	С	None	0	5	07/09/2007
1654	Aves	Artamidae	Cracticus nigrogularis	pied butcherbird	С	None	0	6	04/09/2020
1644	Aves	Artamidae	Gymnorhina tibicen	Australian magpie	С	None	0	3	20/01/1992
1645	Aves	Artamidae	Strepera graculina	pied currawong	С	None	0	1	10/07/1968
1956	Aves	Burhinidae	Burhinus grallarius	bush stone-curlew	С	None	0	1	02/02/2018
1191	Aves	Cacatuidae	Cacatua galerita	sulphur-crested cockatoo	С	None	0	2	04/09/2020
21967	Aves	Cacatuidae	Cacatua tenuirostris	long-billed corella	С	None	0	1	07/09/2007
1193	Aves	Cacatuidae	Eolophus roseicapilla	galah	С	None	0	3	17/11/1991
1636	Aves	Campephagida e	Coracina novaehollandiae	black-faced cuckoo-shrike	С	None	0	6	20/01/1992
1639	Aves	Campephagida e	Edolisoma tenuirostre	common cicadabird	С	None	0	4	15/02/2008
1640	Aves	Campephagida e	Lalage leucomela	varied triller	С	None	0	1	06/12/1987
1948	Aves	Charadriidae	Charadrius leschenaultii	greater sand plover	V	V	0	1	17/11/1991

Taxon Id	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
1936	Aves	Charadriidae	Charadrius mongolus	lesser sand plover	E	E	0	1	17/11/1991
1937	Aves	Charadriidae	Charadrius ruficapillus	red-capped plover	С	None	0	1	08/03/1992
1933	Aves	Charadriidae	Vanellus miles novaehollandiae	masked lapwing (southern subspecies)	С	None	0	3	04/09/2020
18293	Aves	Climacteridae	Cormobates leucophaea metastasis	white-throated treecreeper (southern)	С	None	0	3	17/11/1991
1804	Aves	Columbidae	Columba livia	rock dove	None	None	0	1	07/09/2007
1810	Aves	Columbidae	Geopelia humeralis	bar-shouldered dove	С	None	0	2	17/11/1991
18323	Aves	Columbidae	Geopelia placida	peaceful dove	С	None	0	2	17/11/1991
1787	Aves	Columbidae	Leucosarcia melanoleuca	wonga pigeon	С	None	0	1	06/12/1987
1791	Aves	Columbidae	Macropygia amboinensis	brown cuckoo-dove	С	None	0	1	07/09/2007
1793	Aves	Columbidae	Ocyphaps lophotes	crested pigeon	С	None	0	4	04/09/2020
1795	Aves	Columbidae	Phaps chalcoptera	common bronzewing	С	None	0	1	07/09/2007
1774	Aves	Columbidae	Streptopelia chinensis	spotted dove	None	None	0	3	17/11/1991
1779	Aves	Coraciidae	Eurystomus orientalis	dollarbird	С	None	0	4	15/02/2008
1609	Aves	Corvidae	Corvus orru	Torresian crow	С	None	0	8	04/09/2020
1754	Aves	Cuculidae	Cacomantis flabelliformis	fan-tailed cuckoo	С	None	0	1	15/02/2008
1743	Aves	Cuculidae	Cacomantis variolosus	brush cuckoo	С	None	0	1	06/12/1987
1751	Aves	Cuculidae	Centropus phasianinus	pheasant coucal	С	None	0	1	06/12/1987
1756	Aves	Cuculidae	Chalcites minutillus barnardi	Eastern little bronze-cuckoo	С	None	0	1	06/12/1987
1738	Aves	Cuculidae	Eudynamys orientalis	eastern koel	С	None	0	3	17/11/1991
1740	Aves	Cuculidae	Scythrops novaehollandiae	channel-billed	С	None	0	1	15/02/2008
1366	Aves	Estrildidae	Lonchura castaneothorax	chestnut-breasted mannikin	С	None	0	1	07/09/2007
1359	Aves	Estrildidae	Neochmia temporalis	red-browed finch	С	None	0	3	17/11/1991
1949	Aves	Eurostopodidae	Eurostopodus mystacalis	white-throated nightjar	С	None	0	1	06/01/2017
1704	Aves	Falconidae	Falco cenchroides	nankeen kestrel	С	None	0	1	15/02/2008
1691	Aves	Falconidae	Falco longipennis	Australian hobby	С	None	1	1	10/11/1992

Taxon Id	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
1767	Aves	Halcyonidae	Dacelo novaeguineae	laughing kookaburra	С	None	0	5	04/09/2020
1760	Aves	Halcyonidae	Todiramphus macleayii	forest kingfisher	С	None	0	4	04/01/1992
1762	Aves	Halcyonidae	Todiramphus sanctus	sacred kingfisher	С	None	0	3	17/11/1991
1759	Aves	Halcyonidae	Todiramphus sordidus	Torresian kingfisher	С	None	0	3	07/09/2007
1572	Aves	Hirundinidae	Hirundo neoxena	welcome swallow	С	None	0	3	17/11/1991
1585	Aves	Hirundinidae	Petrochelidon ariel	fairy martin	С	None	0	1	15/02/2008
1573	Aves	Hirundinidae	Petrochelidon nigricans	tree martin	С	None	0	1	06/12/1987
1912	Aves	Laridae	Chroicocephalu s novaehollandiae	silver gull	С	None	0	3	16/12/1993
1886	Aves	Laridae	Gelochelidon nilotica	gull-billed tern	SL	None	0	1	17/11/1991
1905	Aves	Laridae	Sternula albifrons	little tern	SL	None	0	1	17/11/1991
18458	Aves	Maluridae	Malurus lamberti	variegated fairy-wren	С	None	0	4	17/11/1991
1558	Aves	Maluridae	Malurus melanocephalus	red-backed fairy-wren	С	None	0	2	17/11/1991
1289	Aves	Megaluridae	Cincloramphus timoriensis	tawny grassbird	С	None	0	2	15/02/2008
1694	Aves	Megapodiidae	Alectura lathami	Australian brush-turkey	С	None	0	1	07/09/2007
1523	Aves	Meliphagidae	Caligavis chrysops	yellow-faced honeyeater	С	None	0	2	31/07/1991
1524	Aves	Meliphagidae	Gavicalis fasciogularis	mangrove honeyeater	С	None	0	1	17/11/1991
1497	Aves	Meliphagidae	Lichmera indistincta	brown honeyeater	С	None	0	4	04/09/2020
1504	Aves	Meliphagidae	Meliphaga Iewinii	Lewin's honeyeater	С	None	0	3	17/11/1991
1507	Aves	Meliphagidae	Melithreptus albogularis	white-throated honeyeater	С	None	0	2	31/07/1991
1489	Aves	Meliphagidae	Myzomela sanguinolenta	scarlet honeyeater	С	None	0	4	04/09/2020
1471	Aves	Meliphagidae	Plectorhyncha lanceolata	striped honeyeater	С	None	0	1	07/09/2007
1764	Aves	Meropidae	Merops ornatus	rainbow bee-eater	С	None	0	1	01/07/1993
1589	Aves	Monarchidae	Grallina cyanoleuca	magpie-lark	С	None	0	4	04/01/1992
1595	Aves	Monarchidae	Monarcha melanopsis	black-faced monarch	SL	None	0	1	07/09/2007
1586	Aves	Monarchidae	Myiagra rubecula	leaden flycatcher	С	None	0	3	17/11/1991
1611	Aves	Nectariniidae	Dicaeum hirundinaceum	mistletoebird	С	None	0	3	17/11/1991

Taxon Id	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
1442	Aves	Oriolidae	Oriolus sagittatus	olive-backed oriole	С	None	0	4	04/09/2020
1444	Aves	Oriolidae	Sphecotheres vieilloti	Australasian figbird	С	None	1	4	17/11/1991
1449	Aves	Pachycephalida e	Colluricincla harmonica	grey shrike-thrush	С	None	0	1	06/12/1987
1437	Aves	Pachycephalida e	Pachycephala rufiventris	rufous whistler	С	None	0	4	17/11/1991
1392	Aves	Pardalotidae	Pardalotus striatus	striated pardalote	С	None	0	2	31/07/1991
1360	Aves	Passeridae	Passer domesticus	house sparrow	None	None	0	4	07/09/2007
1284	Aves	Pelecanidae	Pelecanus conspicillatus	Australian pelican	С	None	0	3	17/11/1991
1347	Aves	Petroicidae	Eopsaltria australis	eastern yellow robin	С	None	0	4	17/11/1991
1261	Aves	Phalacrocoraci dae	Microcarbo melanoleucos	little pied cormorant	С	None	0	5	01/07/1993
1275	Aves	Phalacrocoraci dae	Phalacrocorax carbo	great cormorant	С	None	0	2	17/11/1991
1263	Aves	Phalacrocoraci dae	Phalacrocorax sulcirostris	little black cormorant	С	None	0	7	07/09/2007
1264	Aves	Phalacrocoraci dae	Phalacrocorax varius	pied cormorant	С	None	0	5	04/09/2020
1955	Aves	Podargidae	Podargus strigoides	tawny frogmouth	С	None	0	4	06/09/2019
1180	Aves	Psittacidae	Alisterus scapularis	Australian king-parrot	С	None	0	1	07/09/2007
1136	Aves	Psittacidae	Platycercus adscitus	pale-headed rosella	С	None	0	4	05/11/1994
1124	Aves	Psittacidae	Trichoglossus chlorolepidotus	scaly-breasted lorikeet	С	None	0	1	06/12/1987
1125	Aves	Psittacidae	Trichoglossus moluccanus	rainbow lorikeet	С	None	0	7	04/09/2020
1623	Aves	Psophodidae	Psophodes olivaceus	eastern whipbird	С	None	0	1	06/12/1987
1673	Aves	Rallidae	Gallinula tenebrosa	dusky moorhen	С	None	0	6	04/09/2020
1675	Aves	Rallidae	Gallirallus philippensis	buff-banded rail	С	None	0	3	15/02/2008
1662	Aves	Rallidae	Porphyrio melanotus	purple swamphen	С	None	0	4	08/03/1992
1893	Aves	Recurvirostrida e	Himantopus himantopus	black-winged stilt	С	None	0	4	07/09/2007
1575	Aves	Rhipiduridae	Rhipidura albiscapa	grey fantail	С	None	0	5	17/11/1991
1576	Aves	Rhipiduridae	Rhipidura leucophrys	willie wagtail	С	None	0	3	17/11/1991
1872	Aves	Scolopacidae	Arenaria interpres	ruddy turnstone	SL	None	0	1	17/11/1991
1877	Aves	Scolopacidae	Calidris canutus	red knot	Е	E	0	1	17/11/1991

Taxon Id	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
1878	Aves	Scolopacidae	Calidris ferruginea	curlew sandpiper	CR	CE	0	1	17/11/1991
1880	Aves	Scolopacidae	Calidris ruficollis	red-necked stint	SL	None	0	1	17/11/1991
1856	Aves	Scolopacidae	Calidris tenuirostris	great knot	CR	CE	0	2	16/12/1993
1867	Aves	Scolopacidae	Limosa lapponica baueri	Western Alaskan bar-tailed godwit	V	V	0	2	16/12/1993
1843	Aves	Scolopacidae	Numenius mada gascariensis	eastern curlew	E	CE	0	1	17/11/1991
1845	Aves	Scolopacidae	Numenius phaeopus	whimbrel	SL	None	0	1	17/11/1991
1860	Aves	Scolopacidae	Tringa brevipes	grey-tailed tattler	SL	None	0	2	16/12/1993
1853	Aves	Scolopacidae	Tringa nebularia	common greenshank	SL	None	0	2	16/12/1993
1827	Aves	Scolopacidae	Xenus cinereus	terek sandpiper	SL	None	0	1	17/11/1991
1102	Aves	Strigidae	Ninox boobook	southern boobook	С	None	0	2	14/03/2020
1107	Aves	Strigidae	Ninox strenua	powerful owl	V	None	0	6	31/08/2019
1303	Aves	Sturnidae	Sturnus vulgaris	common starling	None	None	0	3	17/11/1991
1823	Aves	Threskiornithid ae	Platalea regia	royal spoonbill	С	None	0	4	15/02/2008
1812	Aves	Threskiornithid ae	Threskiornis molucca	Australian white ibis	С	None	0	9	16/12/1993
1800	Aves	Threskiornithid ae	Threskiornis spinicollis	straw-necked ibis	С	None	0	4	15/02/2008
1276	Aves	Timaliidae	Zosterops lateralis	silvereye	С	None	0	4	17/11/1991
860	Mammalia	Phascolarctida e	Phascolarctos cinereus	koala	E	Е	0	748	16/04/2019
984	Mammalia	Pteropodidae	Pteropus alecto	black flying-fox	С	None	0	45	17/06/2011
962	Mammalia	Pteropodidae	Pteropus poliocephalus	grey-headed flying-fox	С	V	0	44	17/06/2011
963	Mammalia	Pteropodidae	Pteropus scapulatus	little red flying-fox	С	None	0	3	30/04/2004
964	Mammalia	Pteropodidae	Pteropus sp.	None	С	None	0	1	21/12/2007
838	Mammalia	Tachyglossidae	Tachyglossus aculeatus	short-beaked echidna	SL	None	0	1	24/07/1993
554	Reptilia	Agamidae	Intellagama lesueurii	eastern water dragon	С	None	0	2	04/09/2020
519	Reptilia	Boidae	Morelia spilota	carpet python	С	None	0	12	15/02/2008
63	Reptilia	Chelidae	Chelodina Iongicollis	eastern snake-necked turtle	С	None	0	1	04/09/2020
512	Reptilia	Colubridae	Dendrelaphis punctulatus	green tree snake	С	None	0	2	16/02/1992
508	Reptilia	Colubridae	Tropidonophis mairii	freshwater snake	С	None	0	1	05/06/1989
501	Reptilia	Elapidae	Cacophis harriettae	white-crowned snake	С	None	0	1	21/09/2015

Taxon Id	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
411	Reptilia	Gekkonidae	Hemidactylus frenatus	house gecko	None	None	0	1	07/09/2007
188	Reptilia	Scincidae	Concinnia martini	dark bar-sided skink	С	None	0	1	07/09/2007
240	Reptilia	Scincidae	Ctenotus spaldingi	straight-browed ctenotus	С	None	0	1	07/09/2007
61	Reptilia	Varanidae	Varanus varius	lace monitor	С	None	0	1	07/09/2007

Table 3. Plants recorded within the area of interest and its one kilometre buffer

Taxon ld	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
11769	Equisetopsida	Anacardiaceae	Schinus terebinthifolius	None	None	None	1	1	28/10/2000
22101	Equisetopsida	Arecaceae	Syagrus romanzoffiana	Queen palm	None	None	1	1	28/10/2000
5997	Equisetopsida	Asteraceae	Ageratina adenophora	crofton weed	None	None	1	1	28/10/2000
26362	Equisetopsida	Asteraceae	Sphagneticola trilobata	None	None	None	1	1	28/10/2000
9090	Equisetopsida	Balsaminaceae	Impatiens walleriana	balsam	None	None	1	1	28/10/2000
14649	Equisetopsida	Convolvulaceae	Cuscuta campestris	dodder	None	None	1	1	31/05/1985
11029	Equisetopsida	Convolvulaceae	Ipomoea indica	blue morning-glory	None	None	1	1	28/10/2000
14389	Equisetopsida	Myrtaceae	Melaleuca sieberi	None	С	None	1	1	17/10/1975
7812	Equisetopsida	Poaceae	Cynodon dactylon var. dactylon	None	None	None	1	1	19/11/2013
13154	Equisetopsida	Polygonaceae	Persicaria barbata	None	С	None	1	1	12/04/2000

Table 4. Fungi recorded within the area of interest and its one kilometre buffer

Taxon Id	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
25486	Agaricomycetes	Boletaceae	Boletellus emodensis	None	С	None	1	1	07/04/2014
23453	Lecanoromycet es	Pannariaceae	Physma	None	None	None	1	1	29/08/1980
23368	Lecanoromycet es	Parmeliaceae	Parmotrema austrosinense	None	С	None	1	1	13/03/1975
23448	Lecanoromycet es	Parmeliaceae	Parmotrema tinctorum	None	С	None	1	1	12/03/1975

Table 5. Other species recorded within the area of interest and its one kilometre buffer

No species found within the area of interest and its one kilometre buffer.

Species table headings and codes

WildNet Records Species List (07/07/2022 16:47:06) Lot: 0 Plan: SP308738

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 latest record of the taxon.

Links and Support

Other sites that deliver species information from the WildNet database include:

- <u>Species profile search</u> access species information approved for publication including species names, statuses, notes, images, distribution maps and records
- <u>Species lists</u> generate species lists for Queensland protected areas, forestry areas, local governments and areas defined using coordinates
- · 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 wildlife data API access WildNet species information approved for publication such as notes, images and records etc.
- WetlandMaps 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
- <u>Generalised distribution and densities of Queensland wildlife</u> Queensland species distributions and densities generalised to a 10 km grid resolution
- <u>Conservation status of Queensland wildlife</u> 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.

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)
- Australia's Virtual Herbarium (AVH)
- Protected Matters Search Tool

Disclaimer

Whilst every care is taken to ensure the accuracy of the information provided in this report, the Queensland Government, to the maximum extent permitted by law, makes no representations or warranties about its accuracy, reliability, completeness, or suitability, for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which the user may incur as a consequence of the information being inaccurate or incomplete in any way and for any reason.



APPENDIX 2

Matters of State Environmental Significance Mapping



Department of Environment and Science

Environmental Reports

Matters of State Environmental Significance

For the selected area of interest Lot: 0 Plan: SP308738

Environmental Reports - General Information

The Environmental Reports portal provides for the assessment of selected matters of interest relevant to a user specified location, or area of interest (AOI). All area and derivative figures are relevant to the extent of matters of interest contained within the AOI unless otherwise stated. Please note, if a user selects an AOI via the "central coordinates" option, the resulting assessment area encompasses an area extending for a 2km radius from the point of interest.

All area and area derived figures included in this report have been calculated via reprojecting relevant spatial features to Albers equal-area conic projection (central meridian = 146, datum Geocentric Datum of Australia 1994). As a result, area figures may differ slightly if calculated for the same features using a different co-ordinate system.

Figures in tables may be affected by rounding.

The matters of interest reported on in this document are based upon available state mapped datasets. Where the report indicates that a matter of interest is not present within the AOI (e.g. where area related calculations are equal to zero, or no values are listed), this may be due either to the fact that state mapping has not been undertaken for the AOI, that state mapping is incomplete for the AOI, or that no values have been identified within the site.

The information presented in this report should be considered as a guide only and field survey may be required to validate values on the ground.

Please direct queries about these reports to: Planning.Support@des.qld.gov.au

Disclaimer

Whilst every care is taken to ensure the accuracy of the information provided in this report, the Queensland Government makes no representations or warranties about its accuracy, reliability, completeness, or suitability, for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which the user may incur as a consequence of the information being inaccurate or incomplete in any way and for any reason.



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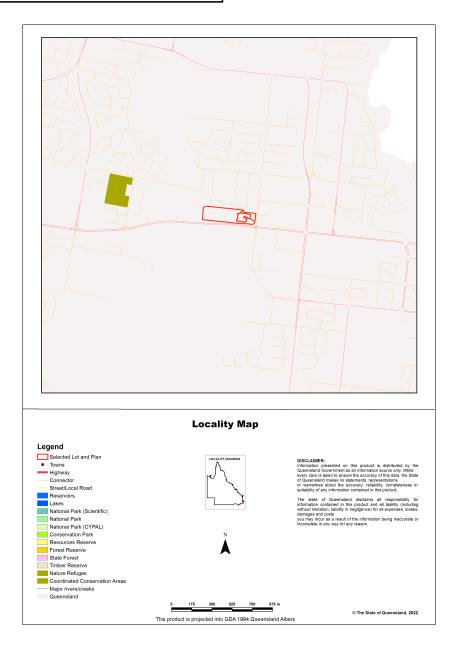
Assessment Area Details
Matters of State Environmental Significance (MSES)
MSES Categories
MSES Values Present
Additional Information with Respect to MSES Values Present
MSES - State Conservation Areas
MSES - Wetlands and Waterways
MSES - Species
MSES - Regulated Vegetation
Map 1 - MSES - State Conservation Areas
Map 2 - MSES - Wetlands and Waterways
Map 3a - MSES - Species - Threatened (endangered or vulnerable) wildlife and special least concern animals
Map 3b - MSES - Species - Koala habitat area (SEQ)
Map 3c - MSES - Wildlife habitat (sea turtle nesting areas)
Map 4 - MSES - Regulated Vegetation
Map 5 - MSES - Offset Areas
Appendices
Appendix 1 - Matters of State Environmental Significance (MSES) methodology
Appendix 2 - Source Data
Appendix 3 - Acronyms and Abbreviations

Assessment Area Details

The following table provides an overview of the area of interest (AOI) with respect to selected topographic and environmental values.

Table 1: Summary table, details for AOI Lot: 0 Plan: SP308738

Size (ha)	4.54
Local Government(s)	Redland City
Bioregion(s)	Southeast Queensland
Subregion(s)	Sunshine Coast - Gold Coast Lowlands
Catchment(s)	Logan-Albert



Matters of State Environmental Significance (MSES)

MSES Categories

Queensland's State Planning Policy (SPP) includes a biodiversity State interest that states:

'The sustainable, long-term conservation of biodiversity is supported. Significant impacts on matters of national or state environmental significance are avoided, or where this cannot be reasonably achieved; impacts are minimised and residual impacts offset.'

The MSES mapping product is a guide to assist planning and development assessment decision-making. Its primary purpose is to support implementation of the SPP biodiversity policy. While it supports the SPP, the mapping does not replace the regulatory mapping or environmental values specifically called up under other laws or regulations. Similarly, the SPP biodiversity policy does not override or replace specific requirements of other Acts or regulations.

The SPP defines matters of state environmental significance as:

- Protected areas (including all classes of protected area except coordinated conservation areas) under the *Nature Conservation Act 1992*;
- Marine parks and land within a 'marine national park', 'conservation park', 'scientific research', 'preservation' or 'buffer' zone under the *Marine Parks Act 2004*;
- Areas within declared fish habitat areas that are management A areas or management B areas under the Fisheries Regulation 2008;
- Threatened wildlife under the *Nature Conservation Act 1992* and special least concern animals under the Nature Conservation (Wildlife) Regulation 2006;
- Regulated vegetation under the Vegetation Management Act 1999 that is:
 - Category B areas on the regulated vegetation management map, that are 'endangered' or 'of concern' regional ecosystems;
 - Category C areas on the regulated vegetation management map that are 'endangered' or 'of concern' regional ecosystems;
 - Category R areas on the regulated vegetation management map;
 - Regional ecosystems that intersect with watercourses identified on the vegetation management watercourse and drainage feature map;
 - Regional ecosystems that intersect with wetlands identified on the vegetation management wetlands map;
- Strategic Environmental Areas under the Regional Planning Interests Act 2014;
- Wetlands in a wetland protection area of wetlands of high ecological significance shown on the Map of Queensland Wetland Environmental Values under the Environment Protection Regulation 2019;
- Wetlands and watercourses in high ecological value waters defined in the Environmental Protection (Water) Policy 2009, schedule 2:
- Legally secured offset areas.

MSES Values Present

The MSES values that are present in the area of interest are summarised in the table below:

Table 2: Summary of MSES present within the AOI

1a Protected Areas- estates	0.0 ha	0.0 %
1b Protected Areas- nature refuges	0.0 ha	0.0 %
1c Protected Areas- special wildlife reserves	0.0 ha	0.0 %
2 State Marine Parks- highly protected zones	0.0 ha	0.0 %
3 Fish habitat areas (A and B areas)	0.0 ha	0.0 %
4 Strategic Environmental Areas (SEA)	0.0 ha	0.0 %
5 High Ecological Significance wetlands on the map of Referable Wetlands	0.0 ha	0.0 %
6a High Ecological Value (HEV) wetlands	0.0 ha	0.0 %
6b High Ecological Value (HEV) waterways	0.0 km	Not applicable
7a Threatened (endangered or vulnerable) wildlife	0.47 ha	10.4%
7b Special least concern animals	0.47 ha	10.4%
7c i Koala habitat area - core (SEQ)	0.47 ha	10.4%
7c ii Koala habitat area - locally refined (SEQ)	0.0 ha	0.0 %
7d Sea turtle nesting areas	0.0 km	Not applicable
8a Regulated Vegetation - Endangered/Of concern in Category B (remnant)	0.0 ha	0.0 %
8b Regulated Vegetation - Endangered/Of concern in Category C (regrowth)	0.0 ha	0.0 %
8c Regulated Vegetation - Category R (GBR riverine regrowth)	0.0 ha	0.0 %
8d Regulated Vegetation - Essential habitat	0.0 ha	0.0 %
8e Regulated Vegetation - intersecting a watercourse	0.0 km	Not applicable
8f Regulated Vegetation - within 100m of a Vegetation Management Wetland	0.0 ha	0.0 %
9a Legally secured offset areas- offset register areas	0.0 ha	0.0 %
9b Legally secured offset areas- vegetation offsets through a Property Map of Assessable Vegetation	0.0 ha	0.0 %

Additional Information with Respect to MSES Values Present

MSES - State Conservation Areas

1a. Protected Areas - estates (no results) 1b. Protected Areas - nature refuges (no results) 1c. Protected Areas - special wildlife reserves (no results) 2. State Marine Parks - highly protected zones (no results) 3. Fish habitat areas (A and B areas) (no results) Refer to Map 1 - MSES - State Conservation Areas for an overview of the relevant MSES. **MSES - Wetlands and Waterways** 4. Strategic Environmental Areas (SEA) (no results) 5. High Ecological Significance wetlands on the Map of Queensland Wetland Environmental Values (no results) 6a. Wetlands in High Ecological Value (HEV) waters (no results) 6b. Waterways in High Ecological Value (HEV) waters (no results)

Refer to Map 2 - MSES - Wetlands and Waterways for an overview of the relevant MSES.

MSES - Species

7a. Threatened (endangered or vulnerable) wildlife

Values are present

7b. Special least concern animals

Values are present

7c i. Koala habitat area - core (SEQ)

Values are present

7c ii. Koala habitat area - locally refined (SEQ)

Not applicable

7d. Wildlife habitat (sea turtle nesting areas)

Not applicable

Threatened (endangered or vulnerable) wildlife habitat suitability models

Species	Common name	NCA status	Presence
Boronia keysii		V	None
Calyptorhynchus lathami	Glossy black cockatoo	V	None
Casuarius casuarius johnsonii	Sthn population cassowary	Е	None
Crinia tinnula	Wallum froglet	V	None
Denisonia maculata	Ornamental snake	V	None
Litoria freycineti	Wallum rocketfrog	V	None
Litoria olongburensis	Wallum sedgefrog	V	None
Macadamia integrifolia		V	None
Melaleuca irbyana		Е	None
Macadamia ternifolia		V	None
Macadamia tetraphylla		V	None
Petaurus gracilis	Mahogany Glider	Е	None
Petrogale persephone	Proserpine rock-wallaby	Е	None
Phascolarctos cinereus	Koala - outside SEQ*	V	None
Pezoporus wallicus wallicus	Eastern ground parrot	V	None
Taudactylus pleione	Kroombit tinkerfrog	Е	None
Xeromys myoides	Water Mouse	V	None

^{*}For koala model, this includes areas outside SEQ. Check 7c SEQ koala habitat for presence/absence.

Threatened (endangered or vulnerable) wildlife species records

(no results)

Special least concern animal species records

(no results)

Shorebird habitat (critically endangered/endangered/vulnerable)

Not applicable

Shorebird habitat (special least concern)

Not applicable

*Nature Conservation Act 1992 (NCA) Status- Endangered (E), Vulnerable (V) or Special Least Concern Animal (SL). Environment Protection and Biodiversity Conservation Act 1999 (EPBC) status: Critically Endangered (CE) Endangered (E), Vulnerable (V)

Migratory status (M) - China and Australia Migratory Bird Agreement (C), Japan and Australia Migratory Bird Agreement (J), Republic of Korea and Australia Migratory Bird Agreement (R), Bonn Migratory Convention (B), Eastern Flyway (E)

To request a species list for an area, or search for a species profile, access Wildlife Online at: https://www.gld.gov.au/environment/plants-animals/species-list/

Refer to Map 3a - MSES - Species - Threatened (endangered or vulnerable) wildlife and special least concern animals, Map 3b - MSES - Species - Koala habitat area (SEQ) and Map 3c - MSES - Wildlife habitat (sea turtle nesting areas) for an overview of the relevant MSES.

MSES - Regulated Vegetation

For further information relating to regional ecosystems in general, go to:

https://www.qld.gov.au/environment/plants-animals/plants/ecosystems/

For a more detailed description of a particular regional ecosystem, access the regional ecosystem search page at: https://environment.ehp.gld.gov.au/regional-ecosystems/

8a. Regulated Vegetation - Endangered/Of concern in Category B (remnant)

Not applicable

8b. Regulated Vegetation - Endangered/Of concern in Category C (regrowth)

Not applicable

8c. Regulated Vegetation - Category R (GBR riverine regrowth)

Not applicable

8d. Regulated Vegetation - Essential habitat

Not applicable

8e. Regulated Vegetation - intersecting a watercourse**

(no results)

8f. Regulated Vegetation - within 100m of a Vegetation Management wetland

Not applicable

Refer to Map 4 - MSES - Regulated Vegetation for an overview of the relevant MSES.

MSES - Offsets

9a. Legally secured offset areas - offset register areas

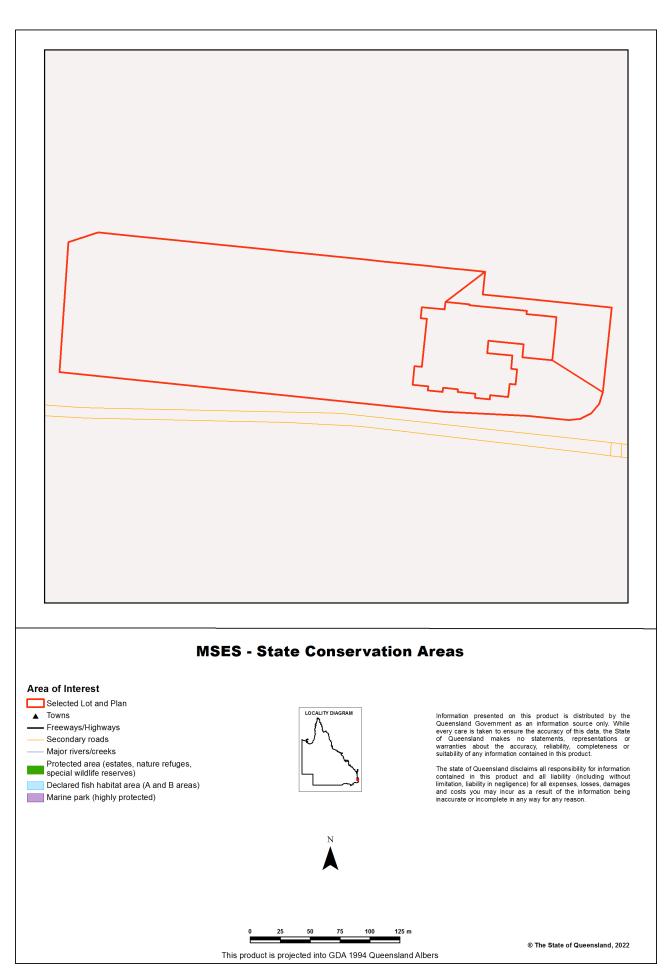
(no results)

9b. Legally secured offset areas - vegetation offsets through a Property Map of Assessable Vegetation

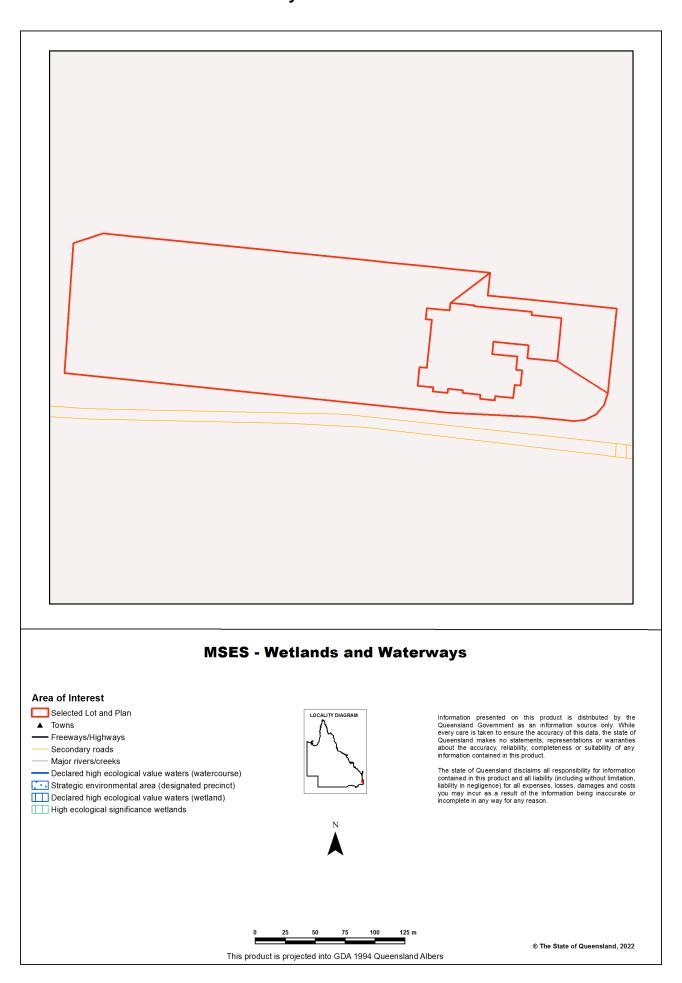
(no results)

Refer to Map 5 - MSES - Offset Areas for an overview of the relevant MSES.

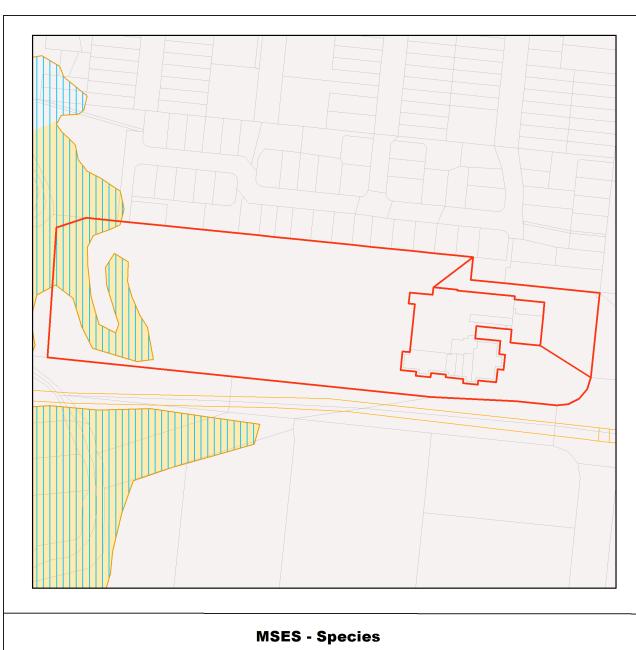
Map 1 - MSES - State Conservation Areas



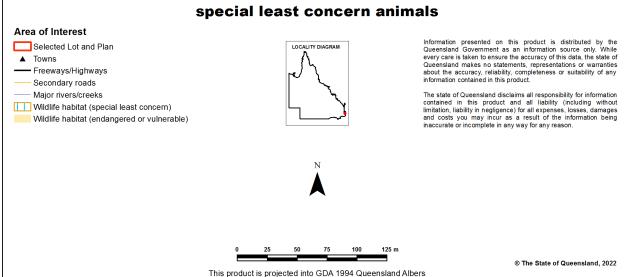
Map 2 - MSES - Wetlands and Waterways



Map 3a - MSES - Species - Threatened (endangered or vulnerable) wildlife and special least concern animals



MSES - Species Threatened (endangered or vulnerable) wildlife and special least concern animals



Map 3b - MSES - Species - Koala habitat area (SEQ)



MSES - Species Koala habitat area (SEQ)

Area of Interest Selected Lot and Plan Towns Freeways/Highways Secondary roads Major rivers/creeks Koala habitat area (core) Koala habitat area (locally refined) The koala habitat mapping within South East Queensland uses regional ecosystem linework compiled at a scale varying from 1:25,000 to 1:100,000. Linework should be used as a guide only. The positional accuracy of regional ecosystem data mapped at a scale of 1:100,000 is +/- 100 metres.

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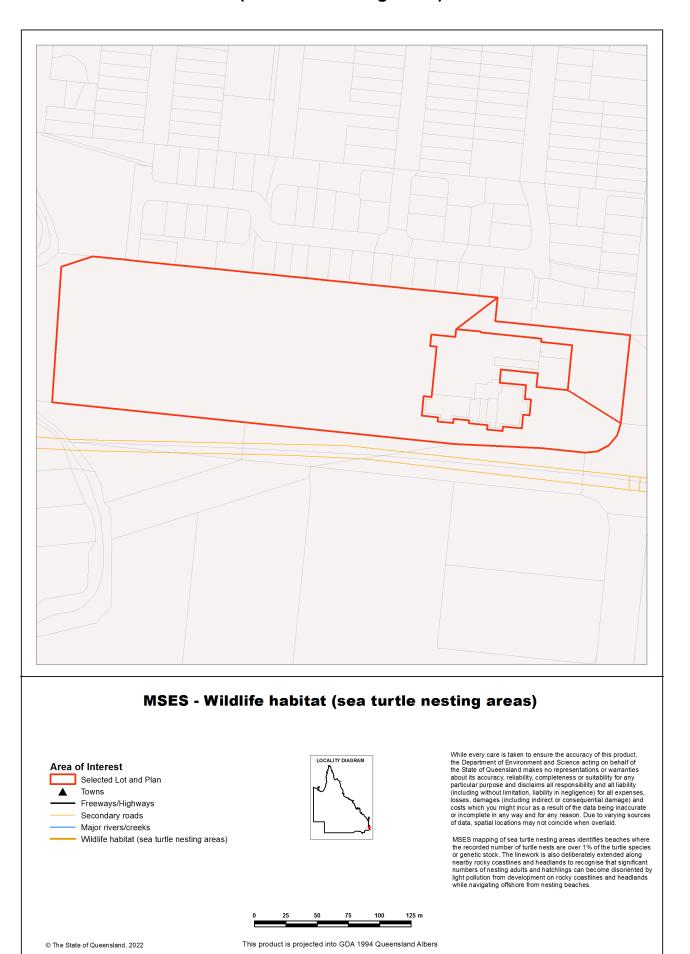
0 25 50 75 100 125 m

This product is projected into GDA 1994 Queensland Albers

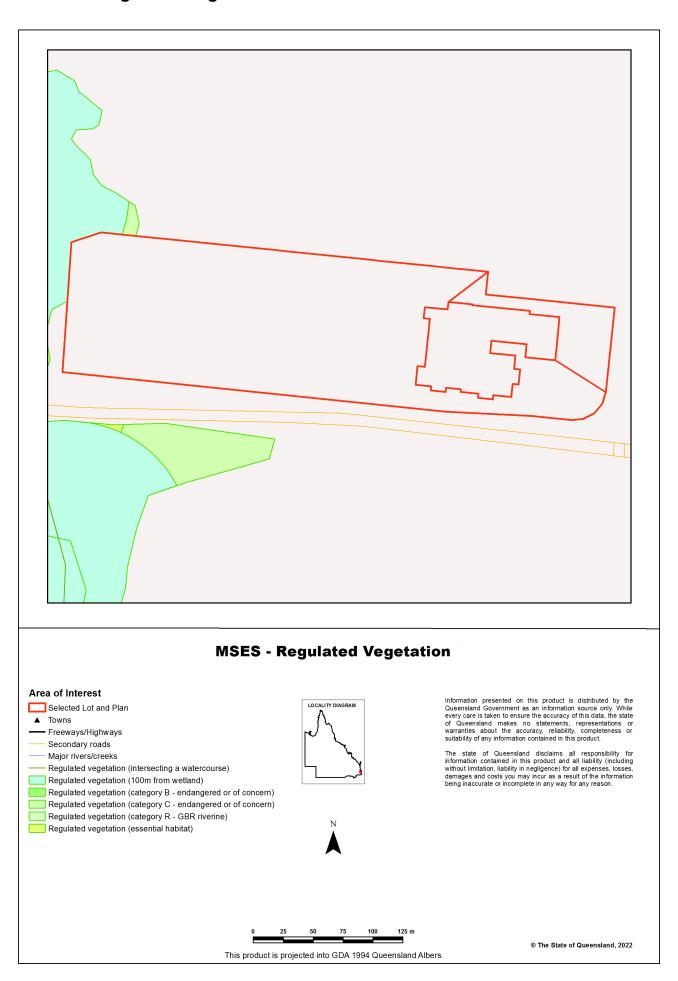
While every care is taken to ensure the accuracy of this product, the Department of Environment and Science acting on behalf of the State of Queensland makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the data being inaccurate or incomplete in any way and for any reason. Due to varying sources of data, spatial locations may not coincide when overlaid.

The represented layers for SEQ 'koala habitat area-core' and 'koala habitat area- locally refined' in MSES are sourced directly from the regulatory mapping under the Nature Conservation (Koala) Conservation Plan 2017. Whilst every effort is made to ensure the information remains current, there may be delays between updating versions. Please refer to the original mapping for the most recent version. See https://environment.des.qld.gov.au/wildlife/animals/filving-with/koalas/mapping

Map 3c - MSES - Wildlife habitat (sea turtle nesting areas)



Map 4 - MSES - Regulated Vegetation



Map 5 - MSES - Offset Areas



Appendices

Appendix 1 - Matters of State Environmental Significance (MSES) methodology

MSES mapping is a regional-scale representation of the definition for MSES under the State Planning Policy (SPP). The compiled MSES mapping product is a guide to assist planning and development assessment decision-making. Its primary purpose is to support implementation of the SPP biodiversity policy. While it supports the SPP, the mapping does not replace the regulatory mapping or environmental values specifically called up under other laws or regulations. Similarly, the SPP biodiversity policy does not override or replace specific requirements of other Acts or regulations.

The Queensland Government's "Method for mapping - matters of state environmental significance for use in land use planning and development assessment" can be downloaded from:

http://www.ehp.qld.gov.au/land/natural-resource/method-mapping-mses.html .

Appendix 2 - Source Data

The datasets listed below are available on request from:

http://qldspatial.information.qld.gov.au/catalogue/custom/index.page

· Matters of State environmental significance

Note: MSES mapping is not based on new or unique data. The primary mapping product draws data from a number of underlying environment databases and geo-referenced information sources. MSES mapping is a versioned product that is updated generally on a twice-yearly basis to incorporate the changes to underlying data sources. Several components of MSES mapping made for the current version may differ from the current underlying data sources. To ensure accuracy, or proper representation of MSES values, it is strongly recommended that users refer to the underlying data sources and review the current definition of MSES in the State Planning Policy, before applying the MSES mapping.

Individual MSES layers can be attributed to the following source data available at QSpatial:

MSES layers	current QSpatial data (http://qspatial.information.qld.gov.au)
Protected Areas-Estates, Nature Refuges, Special Wildlife Reserves	- Protected areas of Queensland - Nature Refuges - Queensland - Special Wildlife Reserves- Queensland
Marine Park-Highly Protected Zones	Moreton Bay marine park zoning 2008
Fish Habitat Areas	Queensland fish habitat areas
Strategic Environmental Areas-designated	Regional Planning Interests Act - Strategic Environmental Areas
HES wetlands	Map of Queensland Wetland Environmental Values
Wetlands in HEV waters	HEV waters: - EPP Water intent for waters Source Wetlands: - Queensland Wetland Mapping (Current version 5) Source Watercourses: - Vegetation management watercourse and drainage feature map (1:100000 and 1:250000)
Wildlife habitat (threatened and special least concern)	- WildNet database species records - habitat suitability models (various) - SEQ koala habitat areas under the Koala Conservation Plan 2019 - Sea Turtle Nesting Areas records
VMA regulated regional ecosystems	Vegetation management regional ecosystem and remnant map
VMA Essential Habitat	Vegetation management - essential habitat map
VMA Wetlands	Vegetation management wetlands map
Legally secured offsets	Vegetation Management Act property maps of assessable vegetation. For offset register data-contact DES
Regulated Vegetation Map	Vegetation management - regulated vegetation management map

GEM

Appendix 3 - Acronyms and Abbreviations

AOI - Area of Interest

DES - Department of Environment and Science

EP Act - Environmental Protection Act 1994

EPP - Environmental Protection Policy

GDA94 - Geocentric Datum of Australia 1994

- General Environmental Matters

GIS - Geographic Information System

MSES - Matters of State Environmental Significance

NCA - Nature Conservation Act 1992

RE - Regional Ecosystem
SPP - State Planning Policy

VMA - Vegetation Management Act 1999

APPENDIX 3

Matters of Local Environmental Significance Mapping

Redland City Council Environmental Significance Overlay



City Plan **ENVIRONMENTAL SIGNIFICANCE OVERLAY Draft Version 6** Overlay Map - OM-007 Sheet 1/2 Matters of State Cadastral Properties Environmental Significance Outline of RCC (MSES) Matters of Local **Environmental Significance** (MLES) Redland CITY COUNCIL SCALE 1:25,000 Kilometers

MSES Data Source: State mapping layers – MSES mapping layers. This mapping has not been locally refined.

The Queensland Government's State Planning Policy Interactive Mapping System may provide more recent MSES mapping (refer to section 8(4) of the Planning Act 2016).

APPENDIX 4 Tree Species list and DBH

APPENDIX 4. TREE SPECIES LIST AND DBH

Tree number	Species	DBH (cm)	Tree number	Species	DBH (cm)
1	Eucalyptus tereticornis	32	46	Melaleuca quinquenervia	31
2	Eucalyptus tereticornis	44	47	Melaleuca quinquenervia	45
3	Eucalyptus tereticornis	42	48	Eucalyptus tereticornis	78
4	Eucalyptus tereticornis	35	49	Melaleuca quinquenervia	66
5	Eucalyptus tereticornis	31	50	Melaleuca quinquenervia	27
6	Eucalyptus tereticornis	70	51	Melaleuca quinquenervia	32
7	Eucalyptus tereticornis	63	52	Melaleuca quinquenervia	39
8	Eucalyptus tereticornis	33	53	Melaleuca quinquenervia	59
9	Eucalyptus tereticornis	32	54	Melaleuca quinquenervia	46
10	Eucalyptus tereticornis	18	55	Corymbia intermedia	25
11	Eucalyptus tereticornis	58	56	Corymbia intermedia	27
12	Eucalyptus microcorys	38	57	Lophostemon confertus	28
13	Corymbia intermedia	38	58	Eucalyptus tereticornis	19
14	Eucalyptus tereticornis	41	59	Corymbia intermedia	10
15	Eucalyptus crebra	64	60	Lophostemon confertus	23
16	Corymbia intermedia	17	61	Lophostemon confertus	35
17	Eucalyptus tereticornis	18	62	Eucalyptus tereticornis	24
18	Corymbia intermedia	63	63	Corymbia intermedia	15
19	Corymbia intermedia	64	64	Corymbia intermedia	32
20	Eucalyptus microcorys	22	65	Lophostemon confertus	22
21	Melaleuca quinquenervia	40	66	Corymbia intermedia	15
22	Melaleuca quinquenervia	60	67	Corymbia intermedia	20
23	Melaleuca quinquenervia	88	68	Corymbia intermedia	10
24	Melaleuca quinquenervia	50	69	Eucalyptus tereticornis	38
25	Melaleuca quinquenervia	30	70	Melaleuca quinquenervia	75
26	Melaleuca quinquenervia	22	71	Melaleuca quinquenervia	60
27	Melaleuca quinquenervia	40	72	Melaleuca quinquenervia	43
28	Melaleuca quinquenervia	35	73	Eucalyptus tereticornis	12
29	Melaleuca quinquenervia	26	74	Lophostemon confertus	10
30	Melaleuca quinquenervia	65	75	Lophostemon confertus	13
31	Melaleuca quinquenervia	35	76	Lophostemon confertus	13
32	Melaleuca quinquenervia	80	77	Melaleuca quinquenervia	47
33	Melaleuca quinquenervia	45	78	Eucalyptus tereticornis	97
34	Melaleuca quinquenervia	19	79	Eucalyptus tereticornis	29
35	Melaleuca quinquenervia	21	80	Eucalyptus tereticornis	44
36	Melaleuca quinquenervia	15	81	Eucalyptus tereticornis	37
37	Melaleuca quinquenervia	32	82	Eucalyptus tereticornis	39
38	Lophostemon suaveolens	17	83	Eucalyptus microcorys	32
39	Lophostemon suaveolens	22	84	Eucalyptus tereticornis	13
40	Lophostemon suaveolens	40	85	Eucalyptus tereticornis	33
41	Lophostemon suaveolens	20	86	Eucalyptus tereticornis	50
42	Lophostemon suaveolens	15	87	Eucalyptus tereticornis	32
43	Melaleuca quinquenervia	33	88	Eucalyptus tereticornis	24
44	Melaleuca quinquenervia	68	89	Eucalyptus tereticornis	40
45	Melaleuca quinquenervia	42	90	Eucalyptus tereticornis	40

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APPENDIX 4. TREE SPECIES LIST AND DBH

Tree number	Species	DBH (cm)	Tree number	Species	DBH (cm)
91	Eucalyptus tereticornis	40	136	Melaleuca quinquenervia	24
92	Eucalyptus tereticornis	40	137	Melaleuca quinquenervia	22
93	Corymbia intermedia	25	138	Melaleuca quinquenervia	23
94	Corymbia intermedia	24	139	Melaleuca quinquenervia	26
95	Eucalyptus tereticornis	10	140	Melaleuca quinquenervia	40
96	Melaleuca quinquenervia	16	141	Melaleuca quinquenervia	80
97	Eucalyptus tereticornis	62	142	Eucalyptus tereticornis	74
98	Lophostemon suaveolens	16	143	Eucalyptus tereticornis	17
99	Corymbia intermedia	25	144	Melaleuca quinquenervia	53
100	Corymbia intermedia	22	145	Melaleuca quinquenervia	34
101	Lophostemon confertus	12	146	Eucalyptus tereticornis	90
102	Lophostemon confertus	26	147	Melaleuca quinquenervia	41
103	Eucalyptus tereticornis	30	148	Melaleuca quinquenervia	38
104	Eucalyptus tereticornis	36	149	Melaleuca quinquenervia	42
105	Melaleuca quinquenervia	30	150	Melaleuca quinquenervia	57
106	Lophostemon suaveolens	12	151	Melaleuca quinquenervia	60
107	Lophostemon suaveolens	12	152	Melaleuca quinquenervia	20
108	Melaleuca quinquenervia	22	153	Melaleuca quinquenervia	19
109	Eucalyptus tereticornis	30	154	Eucalyptus tereticornis	27
110	Lophostemon confertus	30	155	Eucalyptus tereticornis	29
111	Melaleuca quinquenervia	20	156	Eucalyptus tereticornis	30
112	Eucalyptus tereticornis	35	157	Melaleuca quinquenervia	14
113	Melaleuca quinquenervia	35	158	Melaleuca quinquenervia	19
114	Melaleuca quinquenervia	25	159	Melaleuca quinquenervia	10
115	Melaleuca quinquenervia	20	160	Melaleuca quinquenervia	14
116	Melaleuca quinquenervia	15	161	Melaleuca quinquenervia	27
117	Melaleuca quinquenervia	20	162	Eucalyptus tereticornis	58
118	Melaleuca quinquenervia	15	163	Eucalyptus tereticornis	49
119	Melaleuca quinquenervia	16	164	Melaleuca quinquenervia	33
120	Melaleuca quinquenervia	16	165	Melaleuca quinquenervia	20
121	Eucalyptus tereticornis	32	166	Melaleuca quinquenervia	20
122	Melaleuca quinquenervia	20	167	Melaleuca quinquenervia	21
123	Melaleuca quinquenervia	19	168	Melaleuca quinquenervia	11
124	Melaleuca quinquenervia	18	169	Melaleuca quinquenervia	26
125	Melaleuca quinquenervia	17	170	Melaleuca quinquenervia	21
126	Melaleuca quinquenervia	16	171	Melaleuca quinquenervia	30
127	Eucalyptus tereticornis	23	172	Melaleuca quinquenervia	34
128	Melaleuca quinquenervia	23	173	Melaleuca quinquenervia	22
129	Melaleuca quinquenervia	52	174	Melaleuca quinquenervia	54
130	Melaleuca quinquenervia	75	175	Melaleuca quinquenervia	20
131	Melaleuca quinquenervia	36	176	Melaleuca quinquenervia	38
132	Melaleuca quinquenervia	57	177	Melaleuca quinquenervia	13
133	Melaleuca quinquenervia	27	178	Melaleuca quinquenervia	22
134	Melaleuca quinquenervia	38	179	Melaleuca quinquenervia	34
135	Melaleuca quinquenervia	47	180	Melaleuca quinquenervia	23

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APPENDIX 4. TREE SPECIES LIST AND DBH

Tree number	Species	DBH (cm)	Tree number	Species	DBH (cm)
181	Melaleuca quinquenervia	8	215	Melaleuca quinquenervia	15
182	Melaleuca quinquenervia	26	216	Melaleuca quinquenervia	38
183	Melaleuca quinquenervia	27	217	Melaleuca quinquenervia	32
184	Melaleuca quinquenervia	28	218	Melaleuca quinquenervia	40
185	Melaleuca quinquenervia	22	219	Melaleuca quinquenervia	35
186	Eucalyptus tereticornis	35	220	Melaleuca quinquenervia	39
187	Melaleuca nodosa	30	221	Melaleuca quinquenervia	20
188	Melaleuca nodosa	13	222	Melaleuca quinquenervia	36
189	Melaleuca quinquenervia	32	223	Melaleuca quinquenervia	40
190	Melaleuca quinquenervia	19	224	Melaleuca quinquenervia	30
191	Melaleuca quinquenervia	21	225	Melaleuca quinquenervia	40
192	Eucalyptus tereticornis	36	226	Melaleuca quinquenervia	29
193	Eucalyptus tereticornis	30	227	Melaleuca quinquenervia	26
194	Melaleuca quinquenervia	18	228	Melaleuca quinquenervia	35
195	Melaleuca quinquenervia	12	229	Melaleuca quinquenervia	32
196	Eucalyptus tereticornis	30	230	Melaleuca quinquenervia	22
197	Eucalyptus tereticornis	21	231	Melaleuca quinquenervia	31
198	Eucalyptus tereticornis	13	232	Melaleuca quinquenervia	32
199	Melaleuca quinquenervia	50	233	Melaleuca quinquenervia	36
200	Melaleuca quinquenervia	28	234	Melaleuca quinquenervia	42
201	Melaleuca quinquenervia	32	235	Melaleuca quinquenervia	18
202	Melaleuca quinquenervia	29	236	Melaleuca quinquenervia	24
203	Melaleuca quinquenervia	8	237	Melaleuca quinquenervia	15
204	Melaleuca quinquenervia	35	238	Melaleuca quinquenervia	28
205	Melaleuca quinquenervia	32	239	Melaleuca quinquenervia	17
206	Melaleuca quinquenervia	29	240	Melaleuca quinquenervia	21
207	Corymbia citriodora	40	241	Melaleuca quinquenervia	12
208	Melaleuca quinquenervia	45	242	Melaleuca quinquenervia	12
209	Corymbia citriodora	25	243	Melaleuca quinquenervia	30
210	Corymbia torelliana	29	244	Melaleuca quinquenervia	19
211	Melaleuca quinquenervia	20	245	Melaleuca quinquenervia	12
212	Corymbia citriodora	19	246	Melaleuca quinquenervia	19
213	Melaleuca quinquenervia	20	247	Melaleuca quinquenervia	24
214	Melaleuca quinquenervia	20	248	Melaleuca quinquenervia	43

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APPENDIX 5

Likelihood of Occurrence of Listed Fauna Species