



Mount Gilead Residential Development

Koala Management Plan – Revision 1

Lendlease Communities (Mt Gilead) Pty Ltd



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Template 2.8.1

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Abbreviations

Abbreviation	Description
Action	Means construction of a residential development including water and sewerage infrastructure, roads and open space recreation areas as defined in EPBC decision 2015/7599
Action area	The areas marked as 'development area' in Figure 1 of this report
Approval Holder	Lendlease Communities (Mt Gilead) Pty Ltd
APZ	Asset Protection Zone
BC Act	NSW <i>Biodiversity Conservation Act 2016</i>
Biocertification	Biodiversity Certification
BMDB	Bell Miner Die Back
CAR	Corrective Action Report
CCC	Campbelltown City Council
CEEC	Critically Endangered Ecological Community
CEMP	Construction Environmental Management Plan
CPW	Cumberland Plain Woodland
Dbh	Diameter at breast height
DEWHA	former Commonwealth Department of the Environment, Water, Heritage and Arts (now DCCEEW)
DotE	former Commonwealth Department of the Environment (now DCCEEW)
DotEE	former Commonwealth Department of the Environment and Energy (now DCCEEW)
EEC	endangered ecological community
ELA	Eco Logical Australia
EMP	Environmental Management Plan
EP&A Act	NSW <i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	Commonwealth <i>Environment Protection & Biodiversity Conservation Act 1999</i>
KMP	Koala Management Plan
Lendlease	Lendlease Communities (Mt Gilead) Pty Ltd
LGA	Local Government Area
MDP	Metropolitan Development Program
MNES	Matters of National Environmental Significance
OEH	Office of the Environment and Heritage
RFEF	River-Flat Eucalypt Forest
SEPP	State Environmental Planning Policy
SSTF	Shale Sandstone Transition Forest
Study area	The area outlined in Figure 1 of this report
SWMS	Safe Work Method Statement
TPZ	Tree Protection Zone

Declaration of Accuracy

I declare that:

1. To the best of my knowledge, all the information contained in, or accompanying this Management Plan (*Mount Gilead Residential Development Construction Environmental Management Plan EPBC 2015/7599*) is complete, current and correct.
2. I am duly authorised to sign this declaration on behalf of the approval holder.
3. I am aware that:
 - a. Section 490 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) makes it an offence for an approval holder to provide information in response to an approval condition where the person is reckless as to whether the information is false or misleading.
 - b. Section 491 of the EPBC Act makes it an offence for a person to provide information or documents to specified persons who are known by the person to be performing a duty or carrying out a function under the EPBC Act or the *Environment Protection and Biodiversity Conservation Regulations 2000* (Cth) where the person knows the information or document is false or misleading.
 - c. The above offences are punishable on conviction by imprisonment, a fine or both.

Signed



Full name

Robert Keir Humphries, Eco Logical Australia Pty Ltd



Full name

Mark Iain Anderson, Lendlease Communities (Mt Gilead) Pty Ltd

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1. Introduction

Eco Logical Australia (ELA) has been commissioned by Lendlease Communities (Mount Gilead) Pty Ltd (Lendlease) to prepare an update to the Koala Management Plan (KMP) for the Mount Gilead Residential Development at Gilead, NSW, hereafter called ‘the development’.

The Mount Gilead development is located within the Campbelltown City Council (CCC) Local Government Area (LGA) approximately 5 km south of Campbelltown City centre on the following lots, Lots 2, 3, 4 and 5 DP 1240836, Lots 10, 11 and 12 DP 1261146 and Part Lot 2 DP1218887 (formally Lot 61 DP 752042, and Lots 1, 2, 3, 4 and 5 DP 1240836).

1.1 Planning and approval background

In 2015, Lendlease proposed a residential development of approximately 1,700 lots at Gilead (**Figure 1**). The proposal (EPBC 2015/7599) was referred to the Department of the Environment and Energy (DotEE) in October 2015 and was determined to be a Controlled Action in relation to Matters of National Environmental Significance, (MNES) including for impacts to the vulnerable Koala and its habitat.

Accordingly, a Preliminary Documentation Environmental Assessment Report was submitted and was placed on public exhibition between 20 December 2017 and 2 February 2018. Following updates to the report to reflect responses to public submissions in August 2018, DotEE granted approval on 21 December 2018 (**Appendix A**) with Conditions of Approval 5 and 7 relating to the Koala, specifically.

A KMP was prepared and submitted for review to DotEE on 9 July 2019. The KMP was approved by the then DotEE on 12/12/2019 (**Appendix B**).

The KMP has been revised to include additional mitigation measures proposed to be implemented in addition to the mitigation measure contained in the original KMP.

Table 1: Conditions of the EPBC 2015/7599 approval

Condition	Condition Requirement	Where addressed in this KMP?
5	To compensate for impacts on Koala, the approval holder must acquire and retire no less than 150 Biodiversity credits for the Koala from the Appin West Offset Area (Biobank site ID 215) prior to the commencement of the action.	<p>Lendlease has acquired 150 Koala credits from the Appin West Biobank site (BB ID 215) in the Appin West Offset Area. These credits equate to the permanent protection of 21.13 ha of Koala habitat representing the Campbelltown-Wollondilly Koala population.</p> <p>These credits were retired on 15 October 2019 and the DoTEE were notified on 30 October 2019 (Appendix C).</p> <p>In addition to these credit retirements, Lendlease has retired an additional 284 Koala credits from two biobank sites that have been registered within the development study area (equivalent to 22.25 ha of Koala habitat) and 151 credits (equivalent to 21.27 ha of Koala habitat) from the Noorumba Reserve Biobank site which is adjacent to the action area (Appendix C).</p>

Condition	Condition Requirement	Where addressed in this KMP?
		The credits retired from these biobank sites will permanently protect and manage 64.65 ha of Koala habitat.
7	Prior to the commencement of the action, the approval holder must prepare and implement a KMP for the proposed 'action area'.	A draft of this report was submitted to the DoTEE for review on 9 July 2019.
7	The KMP must include provisions for the approval holder to contribute at least \$50,000 each year for 5 years to fund activities outlined in the plan.	Table 4

1.2 Objectives of the KMP

A KMP was prepared in November 2019 to meet the requirements of Condition 7 of the Environment Protection and Biodiversity Conservation (EPBC) Act approval EPBC 2015/7599 (see **Appendix A**). That KMP was approved by the then DotEE (now Department of Climate Change, Energy, the Environment and Water (DCECEEW)) on 12 December 2019 (**Appendix B**).

The purpose of this revised KMP is to:

- include additional mitigation measures proposed to be implemented in addition to the mitigation measure contained in the original KMP.

1.3 Application

The Mount Gilead 'Study Area' (**Figure 1**) consists of:

- Conservation Areas (two registered and one proposed Biobank sites)
- Retained Land (Rural Land and Open Space)
- The Development Area.

This KMP applies to the construction and operation of the development within the areas marked as 'Development Area' in **Figure 1**.

1.4 Outline of the KMP

This KMP sets out:

- A description of the action area;
- a summary of research on the Koala in relation to the action area;
- potential impacts of the development on the Koala;
- Koala management actions during the following phases of the development:
 - Design;
 - Construction; and
 - Operation
- training, education and awareness;
- hold points;
- monitoring.

2. Development area description

The development area (**Figure 1**) covers a total area of approximately 210 hectares of zoned urban development located within a semi-urban area. The site has historically been used for agricultural purposes and contains cleared paddocks with improved pastures. Pockets of residual vegetation are located along drainage lines and steeper slopes. The site comprises remnant and degraded native vegetation and exotic pastures.

The development area consists of residential development with approximately 1,700 lots. It also includes the development of:

- Recreation and active Open Space areas, with some landscaping consistent with local native vegetation;
- Services, including water, sewer and electricity infrastructure;
- A street network of roads, access ways and parking;
- Bushfire Asset Protection Zones (APZ);
- Detention basins to capture and treat run-off water captured by road curbs and gutters;
- Protection and maintenance of existing riparian corridors and rural areas.

The construction phase commenced in 2019 and is forecast to be completed in 2026.

Figure 2 shows the extent of koala habitat within the action area and which habitat areas have been approved for clearing and which comprise 'retained' habitat areas (rural land and Biobank sites or offset areas).

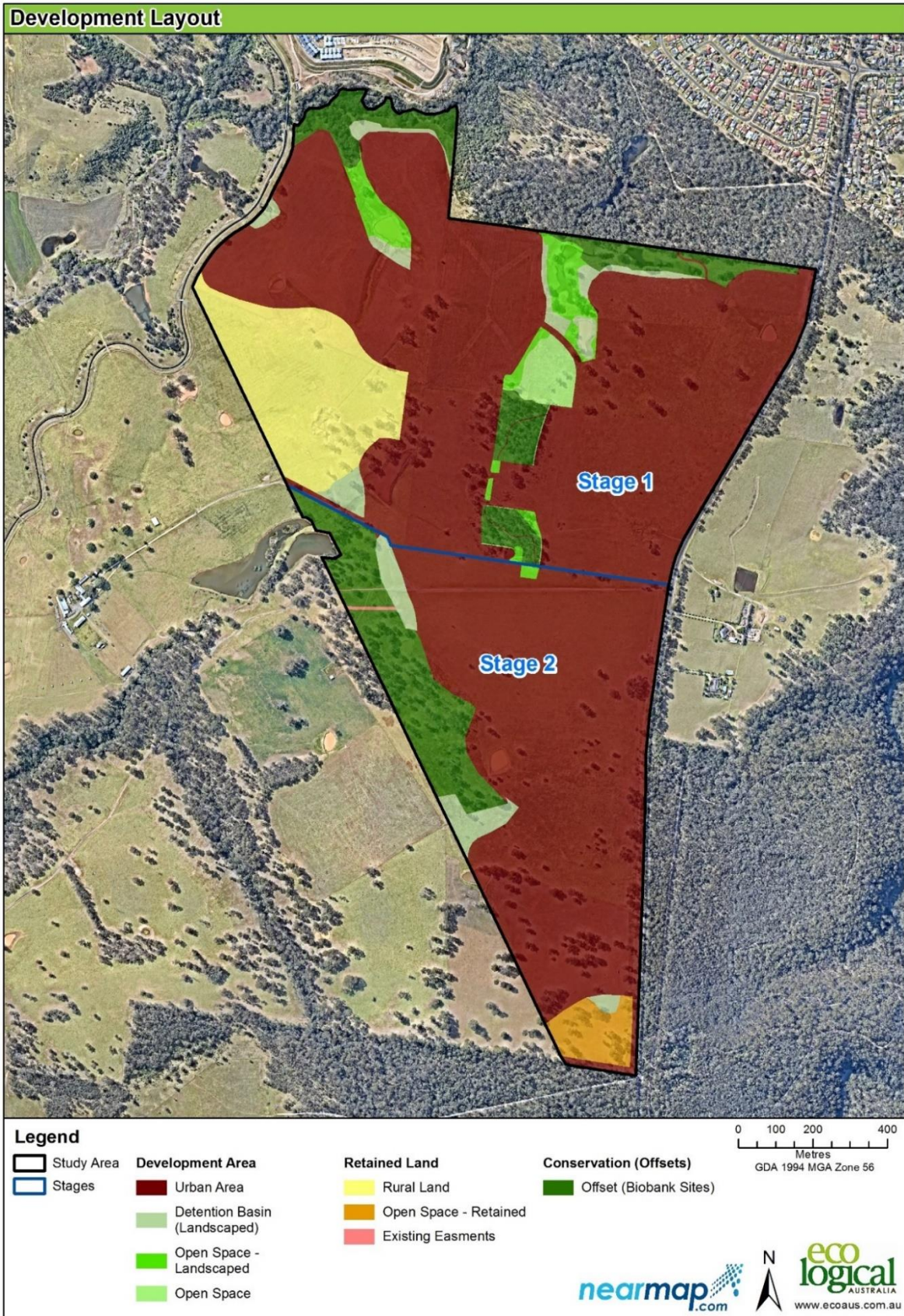


Figure 1: Approved Development are as per EPBC Act decision 2015/7599 dated 21 December 2018

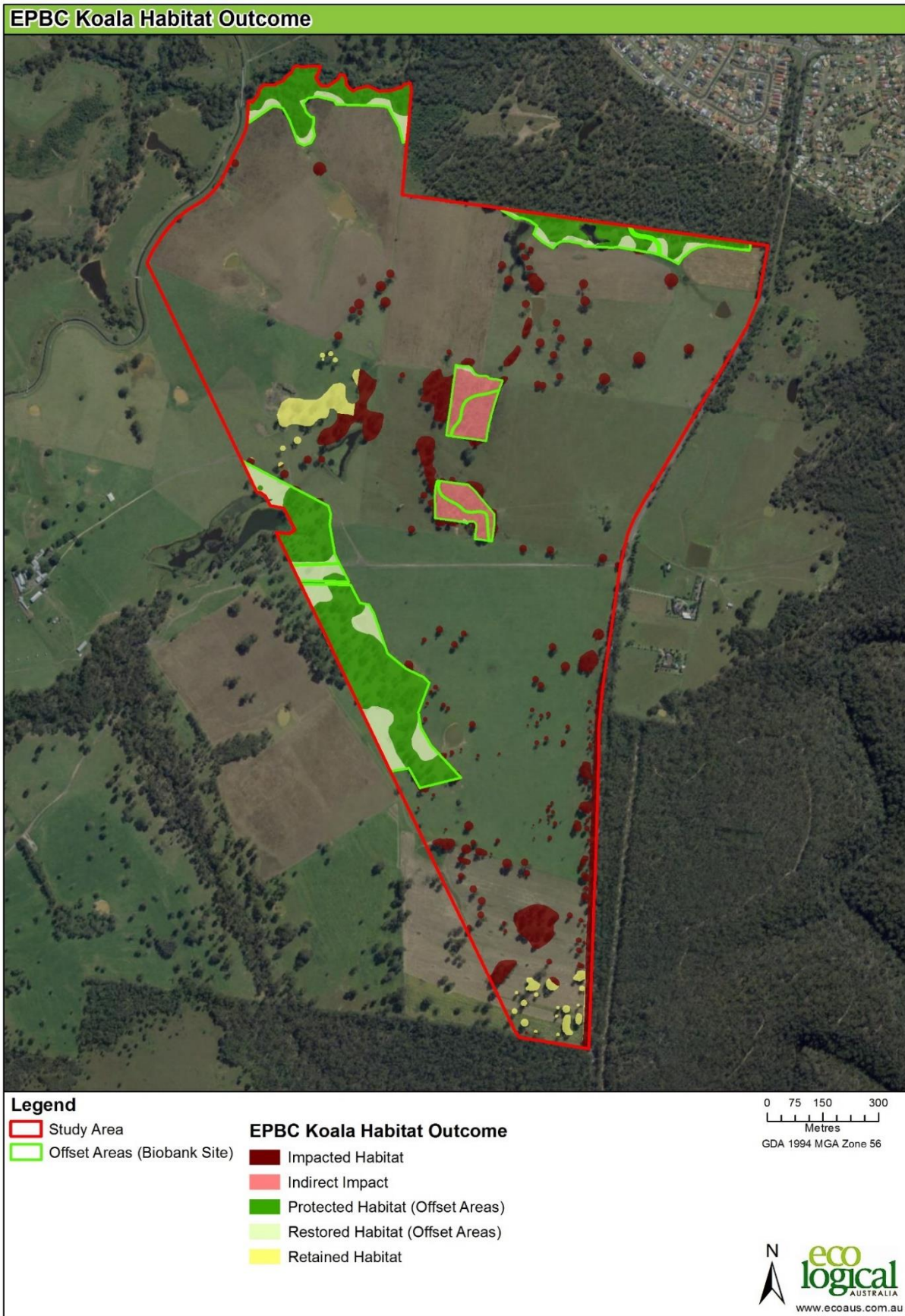


Figure 2: Impacted and protected Koala habitat as per EPBC Act decision 2015/7599 dated 21 December 2018

3. Koalas in the Study Area

3.1 Distribution

Numerous surveys and studies have been undertaken within and around the Study Area and Action Area which contain information relating to the Koala, including the:

- Mt Gilead MDP Land Rezoning Ecological Assessment (ELA 2014);
- Mt Gilead MDP land Biodiversity Certification Assessment Report and Biocertification Strategy (ELA 2018a);
- South Campbelltown Koala Habitat Connectivity Study (Biolink 2018a);
- The revised Comprehensive Koala Plan of Management (CKPoM) for the Campbelltown LGA (Biolink 2018b).
- Office of the NSW Chief Scientist & Engineer advice on koala protection (2019, 2021a & 2021b); and
- Annual Mt Gilead Koala population studies 2021 and 2022 (Wild Conservation).

The Campbelltown City Council (CCC) area is currently estimated to have a widely dispersed koala population of around 400 animals (Biolink 2018b).

Koalas have been recorded within remnant patches of intact bushland adjacent to the study area (Noorumba Reserve, Beulah Biobank site and Browns Bush (Wild Conservation 2021 and 2022) and along the Woodhouse Creek corridor to the west of the study (Biolink 2018a), and it is likely that individual animals will use remnant paddock trees within the action area for time to time (**Figure 3**). In addition, there are several road kill records along Appin Road adjacent to the study area where Koalas are likely using habitat resources on both the eastern and western sides of Appin Road. These studies provide a consistent record of Koala from the broader locality over the past 20 years and activity within the action area.

In 2021 the Office of the NSW Chief Scientist & Engineer provided 4 overarching recommendations to ensure the adequacy of koala protection measures for the Campbelltown Koala population. These measures were:

- increasing and improving existing habitat by, for example, establishing the Georges River Koala Reserve;
- improving connectivity by constructing koala movement crossings and protecting koalas from urban threats with exclusion fencing;
- active monitoring and using adaptive management for koalas; and
- adopting good practices for disease prevention including vaccinations.

3.2 Habitat

The most important habitat factor influencing Koala occurrence is the suite of food tree species available. In any one area, the Koala relies primarily on regionally specific primary and/or secondary food tree species. If primary food tree species are not present or occur in low density, Koalas will rely on secondary food tree species, but the carrying capacity of the habitat (i.e. number of animals per hectare) is inevitably lower (DECC 2008).

The Campbelltown Comprehensive Koala Plan of Management (Biolink 2018b) lists eight primary; secondary and supplementary preferred food tree species in the Campbelltown LGA (**Table 2**), four of which have been recorded in the Study Area.

The Study Area contains remnant Cumberland Plain Woodland (CPW) and Shale Sandstone Transition Forest (SSTF) (**Figure 4**). These vegetation communities provide habitat for Koala, including Koala Food Trees. The majority of the intact areas of these communities in the Study Area are protected within registered biobank sites (the Mt Gilead-Noorumba, Macarthur-Onslow and Hillsborough Biobank sites as shown in **Figure 2**).

Table 2: Koala Food Trees in the CCC LGA (Source Biolink 2018b)

Species marked with * have been recorded in the study area.

Species Name	
Primary Food Tree	
<i>Eucalyptus tereticornis</i> *	Forest Red Gum
<i>Eucalyptus viminalis</i>	Ribbon Gum
Secondary Food Tree	
<i>Eucalyptus longifolia</i>	Wollybutt
<i>Eucalyptus moluccana</i> *	Grey Box
<i>Eucalyptus punctata</i> *	Grey Gum
Supplementary Food Tree	
<i>Eucalyptus agglomerata</i>	Blue-leaved Stringybark
<i>Eucalyptus consideniiana</i>	Yertchuk
<i>Eucalyptus globoidea</i> *	White Stringybark

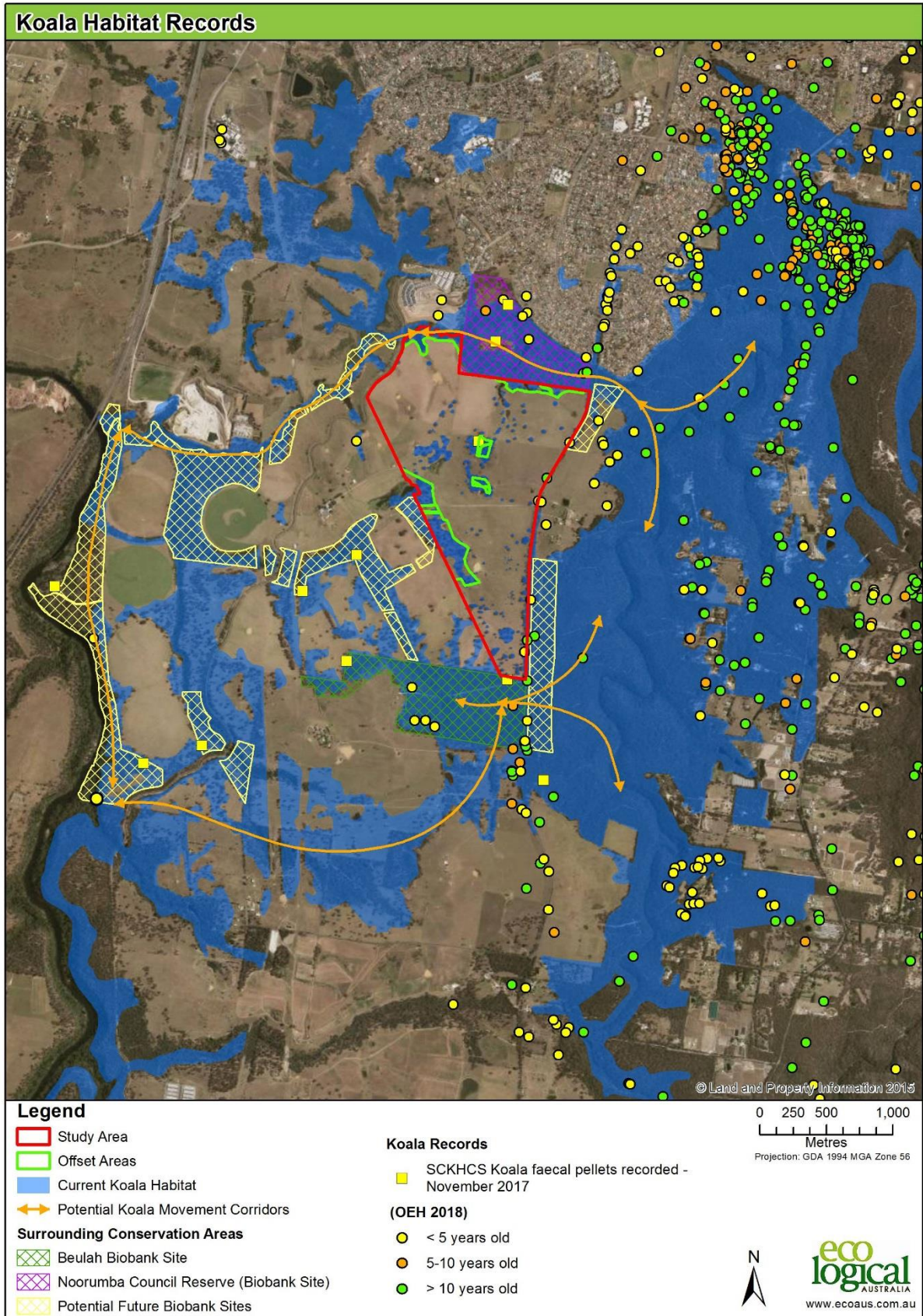


Figure 3: Koala habitat, Koala records and likely movement corridors in the action area and wider area

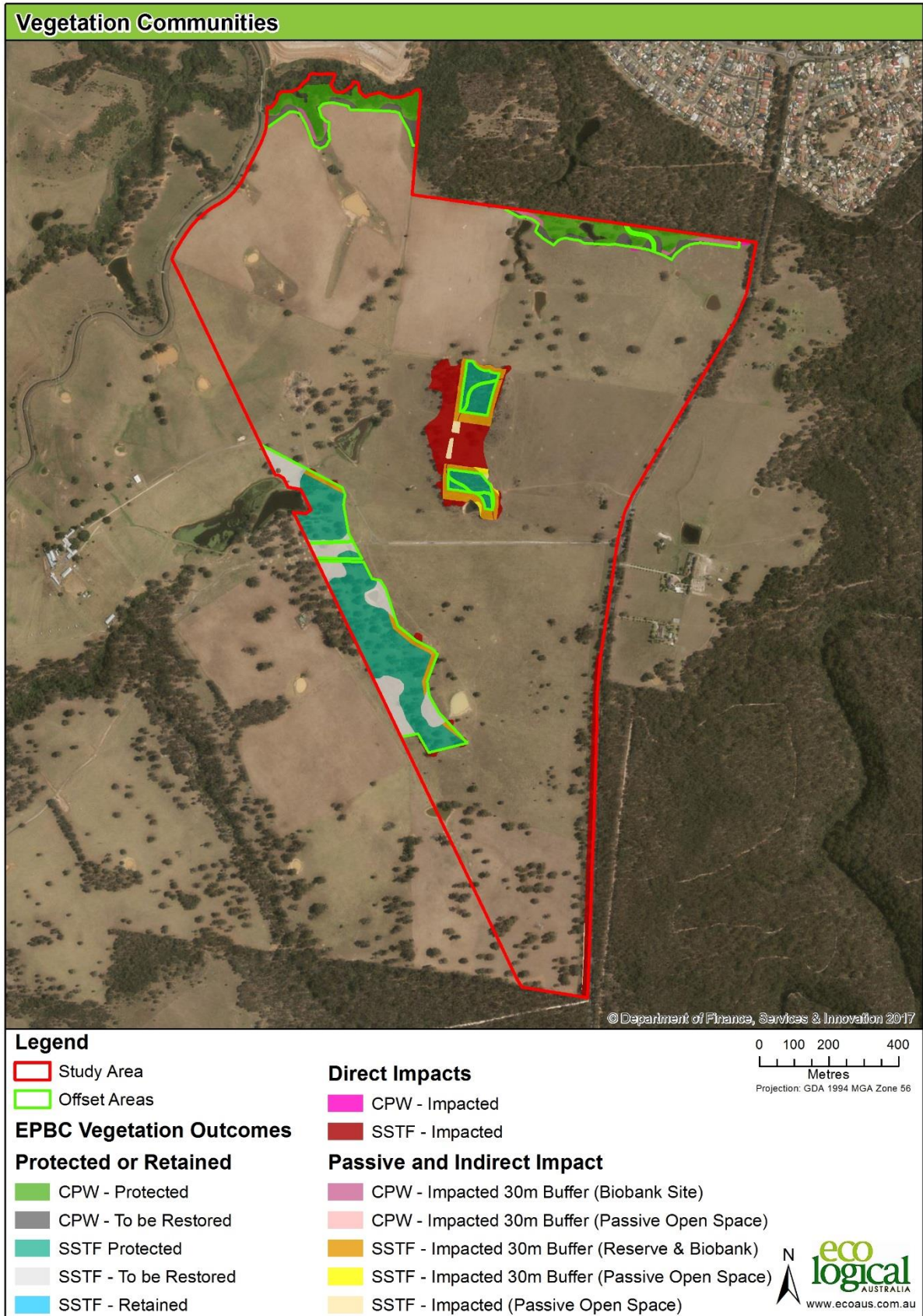


Figure 4: Vegetation Communities (Koala habitat) within the study area to be impacted or retained

4. Listing Status and Conservation Priorities

The Koala was listed as a vulnerable species in NSW under the now repealed Threatened Species Conservation Act in 1996 and a Recovery Plan was approved in 2008 (DECC 2008). The NSW, ACT and Queensland combined populations of the Koala were also listed as a vulnerable species under the EPBC Act in 2011 and a National Koala Conservation and Management Strategy was released in 2009 (DEWHA 2009).

Following the impacts of prolonged drought, followed by the black summer bushfires in 2019/2020, and the cumulative impacts of disease, urbanisation and habitat loss over the past twenty years, the QLD, NSW and ACT Koala combined population up-graded to endangered under the EPBC Act in February 2022 and endangered in NSW under the BC Act in May 2022. A National Koala Recovery Plan was also adopted in March 2022 (DAWE 2022b).

The EPBC Act 2022 Conservation Advice for Koala (DAWE 2022a) outlines 8 threats to koalas in two categories:-

- Threats as Climate Change driven processes
- Drivers of disease and health.

The purpose of the National Koala Recovery Plan is to provide for the research and management actions necessary to stop the decline of, and support the recovery of, the listed Koala so that the chances of its long-term survival in nature are maximised. It is the road map to recovery.

The Recovery Plan outlines three objectives:-

Objective 1

- The area of occupancy and estimated size of populations that are declining, suspected to be declining, or predicted to decline are instead stabilised then increased.
- The area of occupancy and estimated size of populations that are suspected and predicted to be stable are maintained or increased.

Objective 2

- Metapopulation processes are maintained or improved.

Objective 3

- Partners, communities and individuals have a greater role and capability in listed Koala monitoring, conservation and management.

5. Threats to Koala

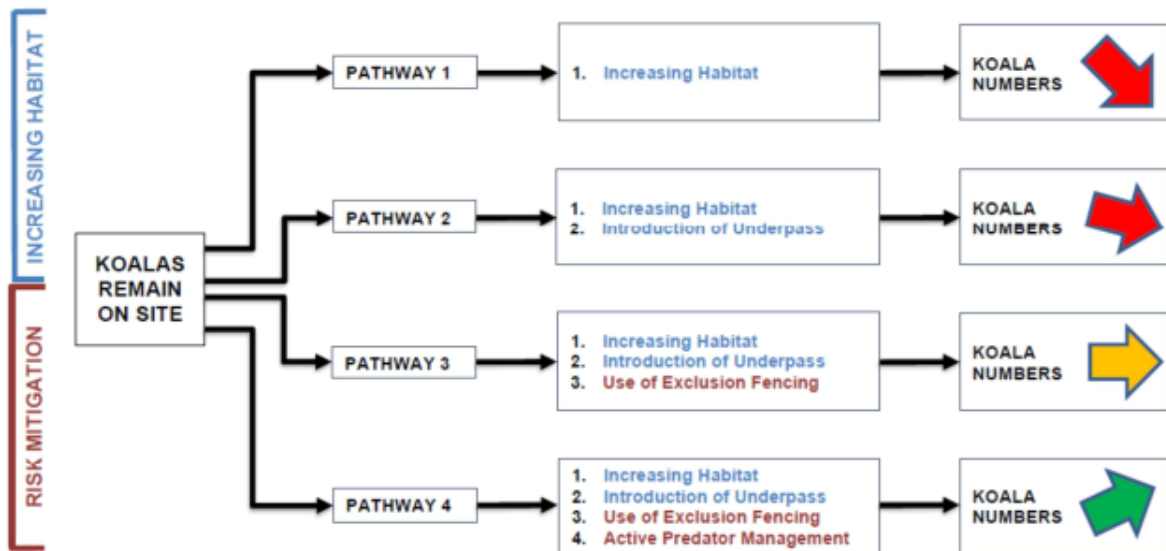
DAWE 2022a identifies a series of threats to the Koala in Queensland, NSW and the Act whilst the Office of NSW Chief Scientist & Engineer (OCSE) identifies a number of threats to Koala’s in the Campbelltown area (OCSE 2020 and 2021a and b).

In 2019, the OCSE was asked to provide independent expert advice on protecting the Campbelltown koala population.

In August 2020, the OCSE published a report titled Advice on the protection of the Campbelltown Koala population – Koala Independent Expert Panel.

The report provides 4 overarching recommendations to ensure the adequacy of koala protection measures. These measures include:

- increasing and improving existing habitat by, for example, establishing the Georges River Koala Reserve
- improving connectivity by constructing koala movement crossings and protecting koalas from urban threats with exclusion fencing
- active monitoring and using adaptive management for koalas
- adopting good practices for disease prevention including vaccinations.



Threats relevant to this development are:

- loss, modification and fragmentation of habitat
- traffic injury/ death
- predation by dogs

- pathogens and disease
- other threats to habitat (Bell Miner dieback)

5.1 Loss, modification and fragmentation of habitat

Land clearing has been a significant cause of direct Koala mortality and for limiting the movement of Koala within a sub-population. This effect is exacerbated in urban environments where the surrounding matrix is relative hostile with higher densities of roads and dogs exacerbating this effect.

Small, fragmented or highly disturbed habitats are less likely to be able to support a Koala population in the long term due to edge effects, limited resource availability and increased predation. Although Koala do utilise scattered trees in largely cleared environments, travelling across open ground leaves them more vulnerable to threats such as predation. Vegetated links are important to support continued Koala movement; where dispersal and recruitment are impeded by barriers such as large areas of open ground and roads, populations would be expected to decline (DECC 2008).

5.2 Traffic injury/ death

Road-kill is a risk to Koalas at any location where a resident koala population and/or regularly used koala movement path is dissected by roads and traffic (DAWE 2022a). There are several records of Koala road kill adjacent to the study area along Appin Road, where Koalas are likely using habitat resources on both the eastern and western sides of Appin Road.

Risks of koala road kill increases where :

- Road speed limits exceed 60 km/hour;
- Traffic volume is high;
- There is low visibility of road edges (such as due to vegetation or lack of lighting); and
- The koala breeding season is on (mid-August through to mid-summer).

In addition to direct impacts (i.e. koala death on roads), the construction of roads through koala habitat can also disrupt breeding and social interactions and isolates populations, reducing dispersal and immigration opportunities.

5.3 Attacks by feral and domestic dogs

Dog attacks are a threat to Koalas that are closely associated with urban expansion, with exposure to the threat increasing as land adjacent to Koala habitat is developed and occupied (DAWE 2022a). Additionally, attacks by dogs are likely to be more common during the koala breeding season as this is when koalas are more active and more likely to be moving through cleared areas.

5.4 Disease

Koala populations in NSW carry the pathogen Chlamydia. Campbelltown is noted as having one of the last disease-free koala populations in the Sydney Region (Biolink, 2018b). However, Koalas are more likely to develop chlamydiosis infection when exposed to environmental stresses such as loss of habitat, harassment by predators, nutritional stress or overcrowding (DAWE 2022a).

5.5 Other threats to Koala habitat such as Bell Miner associated dieback

Bell Miner associated dieback (BMAD) is listed as a key threatening process under the NSW Biodiversity Conservation Act 2016 and is known to directly impact vegetation communities and habitat for threatened fauna, including Koala (OEH 2018).

BMAD is a process whereby dense Bell Miner colonies (a native honeyeater) facilitate sustained psyllid infestations that lead to dieback. It is thought that habitat degradation that leads to increases in understory density, often via woody weed invasion, are heavily implicated in the process (Silver and Carnegie 2017).

BMAD has been observed in the Noorumba Reserve adjacent to the action area.

6. Koala management actions

This Koala PoM was prepared to provide detailed operational guidance for the implementation of the environmental management actions outlined in the EPBC Preliminary Documentation Assessment Report for the action area (ELA 2018) and includes mitigation measures and recommendations included in the CCC CKPoM (Biolink 2018b), Biolink 2018c, and the NSW and National Koala Recovery Plans and Management Strategies (DECC 2008, NSW Government 2018, DAWE 2022b) and the commitments in the Review of Environmental Factors for the Appin Road Upgrade (RMS 2018, 2019, EMM 2022). Additionally, it details on-going actions detailed in the management plans for the three Biobank sites in the study area.

Following the up-grading of koalas to endangered and updates to the policy positions of the NSW Government following the publication of the findings of the NSW CS&E, this Koala PoM has been updated to provide additional conservation outcomes.

Koala management actions are detailed below, and include actions for the design, construction and operation phases where relevant.

6.1 Minimise impact on koala habitat

6.1.1 Design

Measures to avoid and/or reduce impacts to biodiversity values have been included during the design stages of the project, including:

- Identification and avoidance of high or higher conservation value areas during the rezoning process (2013-2017);
- the creation of a biodiversity overlay at rezoning to ensure that these areas were appropriately considered in subsequent development application stages;
- Permanent protection and management of these areas for conservation through registration as Biobank Sites.
- Design of subdivision layout, including perimeter roads, Asset Protection Zones and buffer zones to reduce impacts to and protect offset areas;

As a result of the avoidance and impact minimisation measures incorporated into the planning of the action, the final area of direct impact to Koala habitat is 10.85 ha, mainly loss of individual scattered paddock trees across the development area (ELA 2018b).

Additional measures forming part of the revised koala Plan of management.

- Increased conservation lands (10.35 ha) along Menangle Creek (NSW CS&E – Corridor A) shown in **Figure 5**;
- Inclusion of Koala exclusion fencing between the urban development and on-site offset areas as shown in **Figure 5**;
- Inclusion of two fauna underpass at Glen Lorne / Noorumba Reserve and Browns Bush / Beulah Biobank site as shown in **Figure 5** and **Figures 6** and **7**; and
- Use of drone techniques to assist in pre-clearance surveys and post construction monitoring of the local Koala population.

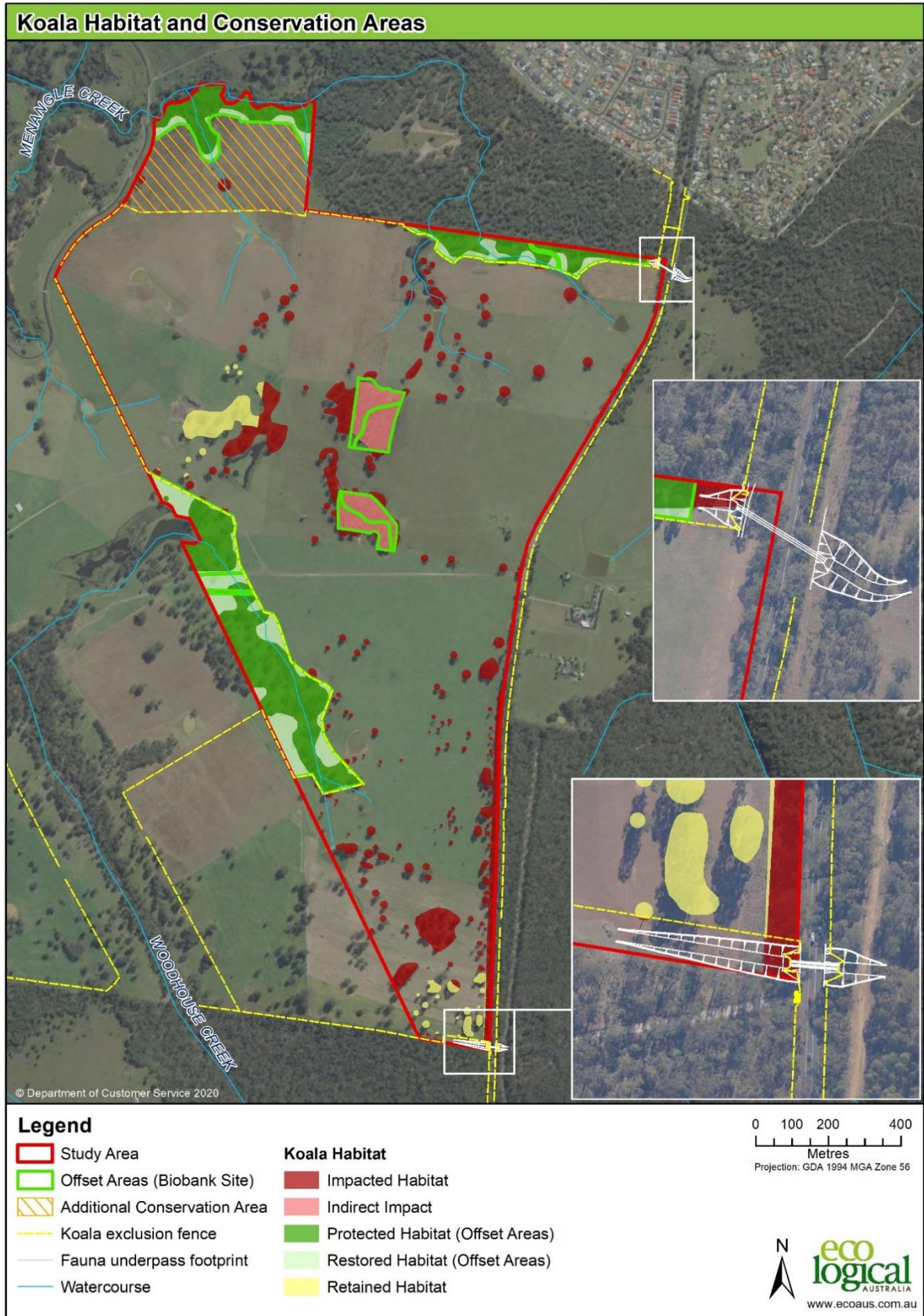


Figure 5: Increased conservation lands along Menangle Creek (NSW CS&E – Corridor A)

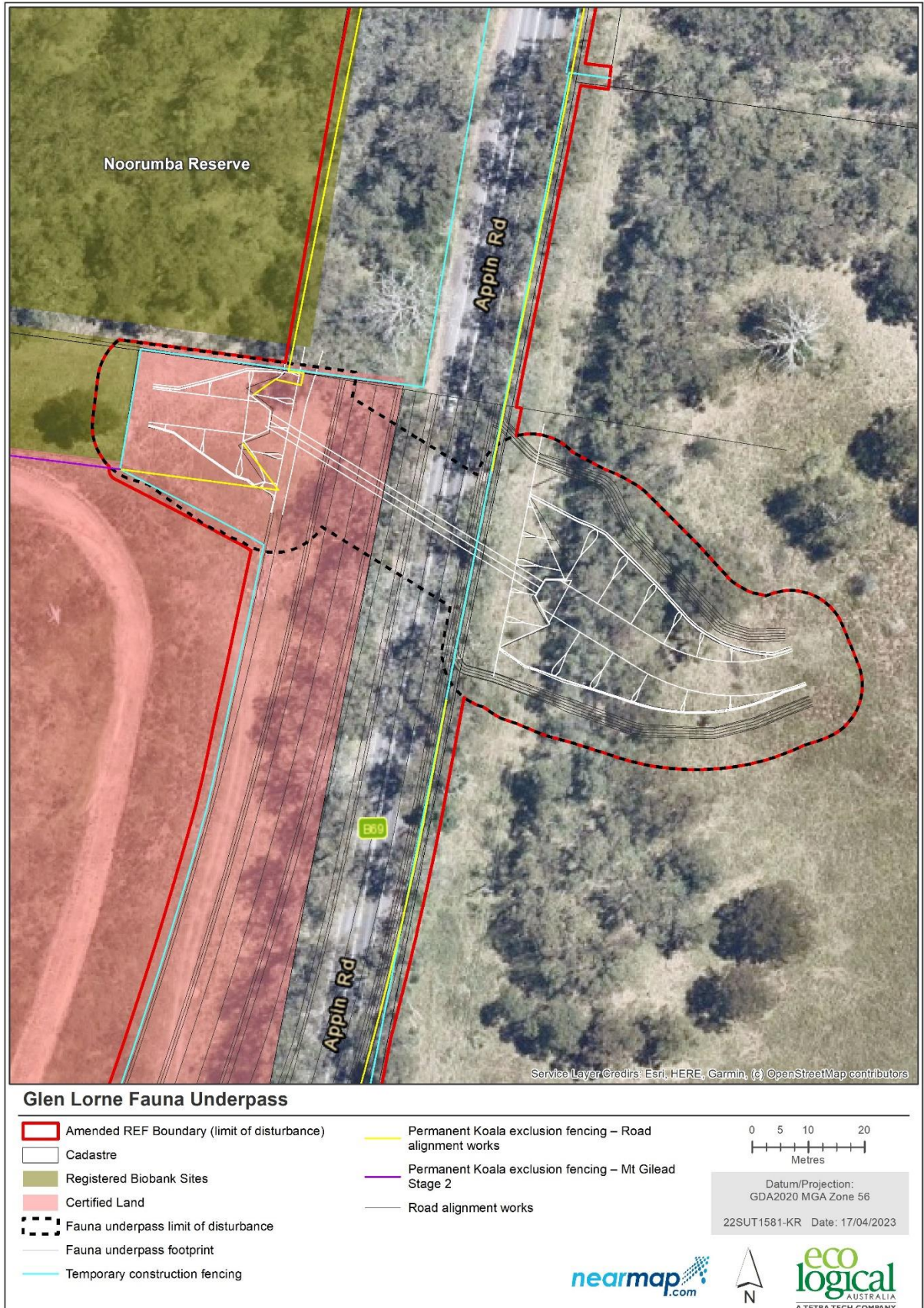


Figure 6: Glen Lorne / Beulah fauna underpass and Koala exclusion fencing

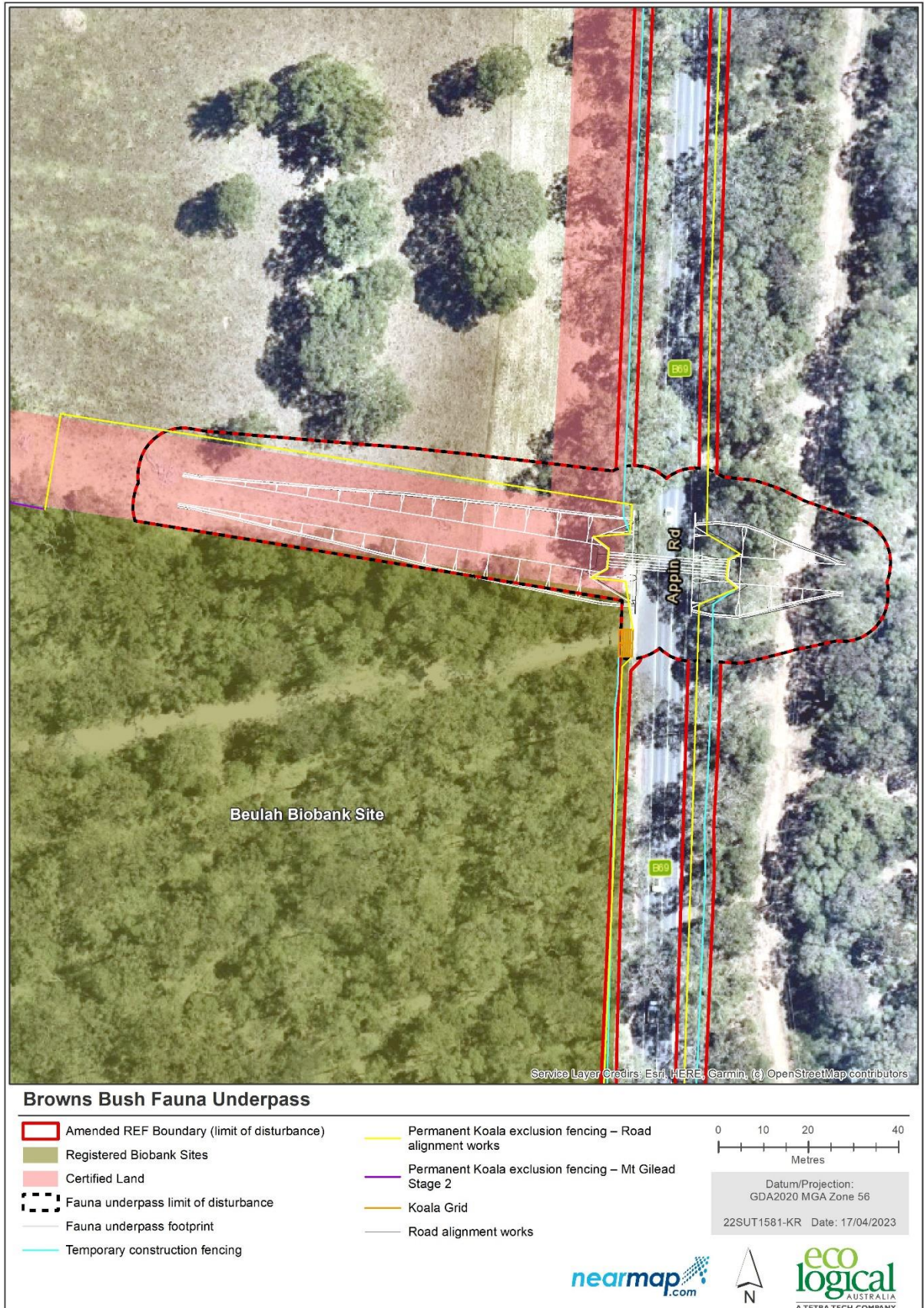


Figure 7: Browns Bush / Beulah fauna underpass and Koala exclusion fencing

6.1.2 Pre-Construction Phase

All Project personnel and contractors will undergo environmental induction training before commencing work on site (Refer to the Mount Gilead Residential Development Construction Environmental Management Plan, ELA 2019b). Information to be addressed during this training will include: -

- Koala identification and location of habitat areas within the action area
- Procedures to be followed in the event that Koalas are found injured in the proximity of works areas.

6.1.3 Construction Phase

The following mitigation measures will be implemented during construction of the development:

- Commitment to prepare and implement a Construction Environmental Management Plan (CEMP approved in 2020, ELA 2020);
- Appointment of a Project Ecologist for the duration of clearing works to ensure conditions relating to biodiversity management of the site are fully implemented and complied with;
- Temporary and permanent protective fencing to be erected around all areas identified for conservation within the development area, including within Open Space areas and Biobank Sites prior to clearing activities commencing to minimise any inadvertent damage. Construction Phase protective fencing details are shown in the approved CEMP (ELA 2019b).
- Permanent Koala exclusion fencing is shown in **Figure 5** and at **Appendix D**.
- Any trees identified as “to be retained” following the project ecologist’s pre-clearing review, shall be included on an environmental control map and clearly marked with an easily visible and removable means of identification.
- A Koala Tree Felling Protocol (**Appendix E**) will be implemented to avoid any direct impacts to Koala that may be utilising trees to be cleared.

Measure undertaken:

- The CEMP was prepared and endorsed by Environmental Approvals Division in 12/12/2019.
- The Project Ecologist was appointed in 2021. The project ecologist has been present during all tree removal works.
- Temporary fencing installed to all conservation areas (2015 - 2022)

Additional measures forming part of the revised koala Plan of management:

- Use of drone technology during pre-clearance surveys to determine if any fauna is present. (Refer **Appendix E**)

6.1.4 Operational Phase

6.1.4.1 Landscaping in Open space/recreation areas

Landscaping and revegetation within the Open Space/Recreation areas will include tree species which are part of the Endangered Ecological Communities recorded within the study area (Cumberland Plain Woodlands; Shale Sandstone Transition Forest and River-flat Eucalypt Forest) and which have been identified as primary or secondary Koala Tree Feed Species in the NSW Koala Recovery Plan (DECC 2008)

and CCC CKPoM (Biolink 2018). Trees that will be used in landscape areas and that will supplement protected CPW and SSTF vegetation in offset areas are listed in **Table 3**.

Table 3: Koala Food Trees to be used in landscaping consistent with Cumberland Plain Woodland and Shale Sandstone Transition Forest characteristic species present in the study area

Species Name	
Primary Food Tree	
<i>Eucalyptus tereticornis</i>	Forest Red Gum
Secondary Food Tree	
<i>Eucalyptus moluccana</i>	Grey Box
<i>Eucalyptus punctata</i>	Grey Gum
Supplementary Food Tree	
<i>Eucalyptus globoidea</i>	White Stringybark

6.1.4.2 Management of Koala habitat in Biobank sites

Koala habitat within the Biobank sites will be managed in accordance with the approved Biobank Agreement Management Plans (refer to Appendices D, E & F in the approved Mount Gilead Residential Development Construction Environmental Management Plan – ELA 2019b).

This includes revegetation and supplementary planting of preferred Koala browse species in cleared areas, feral animal and weed control and access restrictions. Each biobank site is subject to annual reporting and audit and compliance requirements of OEH and the NSW Biodiversity Conservation Trust.

Additional measures forming part of the revised koala Plan of management:

Annual drone based koala monitoring across the action area, on-site offset areas and surrounding conservation areas as surveys by Wild Conservation 2022 to determine and track the local koala population use of the conservation areas and number of animals until the ‘completion of the action’.

- Drone survey protocols will follow the method described in (Beranek et al. 2020) and previous surveys undertaken by Wildlife Conservation in 2021 and 2022 (Wild Conservation 2021, 2022 - **Appendix F**).

6.2 Predation by dogs

6.2.1 Design

Increased koala injuries and fatalities from attacks by dogs are likely to occur with the increased proximity to urban areas. Design measures to mitigate predation by dogs included in the development include:

- Dog proof fencing will be a design requirement for each residential lot in accordance with the Gilead Home Design Guidelines (Lendlease 2019) and Campbelltown Council requirements – **Appendix G**.
- Enforced prohibition of dogs within Biobank areas.
- Designated dog-proof fenced areas within open space / recreation areas where dogs will be permitted to be off leash.
- Public Open space areas and Biobanks will have fencing and site specific signage designed to outline prohibited activities and penalties which will apply. Example of typical Council Reserve fencing and signage is shown in **Appendix H** with Koala exclusion fencing and double gates to be erected around identified Koala corridors as indicated in **Figure 5** and **Appendix H**.

Additional measures forming part of the revised koala Plan of management:

- Koala exclusion fencing to all Koala corridors.

6.2.2 Operational Phase

- In public open spaces, all dogs will be required to be kept under control by their owners, in accordance with Local Government Act 1993, failure to comply may lead to a penalty exceeding \$110.
- Dogs will be prohibited from entry into the Biobank sites. These areas will be actively managed and subject to enforcement powers under the Local Government Act failure to comply may lead to a penalty exceeding \$110.
- All public areas will be effectively signposted with signs which outline permitted and prohibited activities and outline penalties which will apply for non-compliance. Example of typical signage is shown in **Appendix H**.
- Multi-lingual education programs, community information packages, community information seminars and community education events will be held for residents regarding the requirements for dogs within the development. The programs will highlight increased risk of dog attacks during koala breeding season (mid-August through to mid-summer). These programs will be held onsite regularly over a 5 year period by the Developer.

6.3 Traffic injuries or death within the action area

6.3.1 Design

Increased koala fatalities from vehicle strike are likely to occur within the action area as a result of around 5,000 new residents and associated vehicles as there will be a significant increase in traffic volume in the area from population increase. Traffic calming measures proposed in the development include:

- Local roads will have speed limit restrictions of 50 km/h adjacent to open space areas
- Perimeter roads and roads adjacent to Koala habitat areas will be signposted in accordance with Austroads, RMS technical guidelines, Campbelltown City Council Guidelines and Australian Standards. (Indicative signage is shown in **Figure 8**)
- Traffic calming devices will be installed along perimeter roads adjacent to offset areas and Koala habitat
- Vegetation adjacent to roads will be managed to increase visibility of fauna (**Appendix D**).

Additional measures forming part of the revised koala Plan of management:

- Koala exclusion fencing around boundaries of all identified Koala corridors as shown in **Figure 5**.
- Two fauna underpasses to Appin Road specifically designed for koala (**Figures 6 and 7**), and
- Additional koala exclusion fencing on the western side of Appin Road as shown in **Figure 5**.

6.3.2 Construction

Traffic management measures to be implemented during construction, include:

- Construction traffic to utilise clearly defined access and egress points to and from the development site that avoid retained Koala habitat areas.
- Construction traffic within the development site to keep to designated routes where possible.
- Parking and equipment and material laydown areas to be positioned away from conservation areas.
- Construction traffic is to adhere to construction zone speed limits of 20 km/h across the site.
- Exclusion fencing will be installed prior to site works commencing to delineate the limit of areas impacted by the works and accessible by construction traffic.

6.3.3 Operational Phase

Management strategies presented below aim to increase the application of a precautionary approach to reducing the potential for Koala road strike and to increase driver and community awareness:

- 'Koala Warning Signs' dispersed throughout the Mount Gilead road network (example signage shown in **Figure 8**).
- Roadside vegetation adjacent to conservation areas (1-2m) will be managed to minimise the height of ground cover and therefore increase the visibility of any roadside fauna. Turfed areas will be mown, low ground covers will be trimmed mechanically (example shown in **Figure 8**).



Images courtesy Campbelltown City Council Koala Management Plan 2018

Example management of roadside verges to increase visibility of fauna on roadsides



Figure 8: Indicative Koala Warning Signs to be erected on major urban streets adjacent to Koala habitat areas

Additional measures forming part of the revised koala Plan of management:

- Fauna underpass monitoring program to measure the effectiveness of fauna crossing structures (RMS Appin Road Fauna Underpass monitoring requirements - **Appendix I**).

6.4 Diseases and pathogens

6.4.1 Design, Construction and Operation:

As Koalas are more likely to develop chlamydiosis infection when exposed to environmental stresses such as loss of habitat and harassment by predators, mitigation measures described in section 5.1 and section 5.2 will also minimise the risk of chlamydiosis infection by minimising stress to animals through the design, construction and operational phases of the development.

6.4.2 Construction and Operation

Pathogens such as myrtle rust and *Phytophthora* root rot can be spread if carried on infected plant material, contaminated equipment, vehicles and clothing. The following hygiene measures will be put in place to limit the risk of introduction and spread of pathogens during construction of the development, and as part of the management and operation of the Biobank sites:

- all vehicles, machinery, maintenance equipment, tyres and work boots should be free of mud, soil and vegetation prior to entering and leaving the construction site (as outlined in the Mt Gilead CEMP (ELA 2019b))
- Follow the *Arrive Clean, Leave Clean: Guidelines* (Commonwealth of Australia 2015)..

6.5 Bell Miner die back

6.5.1 Operational Phase

Biobank sites will be managed to maintain an open grassy woodland environment consistent with the typical form of Cumberland Plain Woodland and Shale Sandstone Transition Forest. This will include the active management of dense wood weed understory (Blackberry and Lantana) to reduce nesting opportunities for Bell Miner.

6.6 Education and awareness

Education has a key role to play towards ensuring the long-term survival of the Koala in the action area, and the following educational measures will be implemented for the development:

6.6.1 Design Phase

- Permanent signage will be installed adjacent to pathways and entry roads to the site, to raise awareness of the potential presence of koalas within and adjacent to the site.

6.6.2 Construction Phase

- All personnel, including sub-contractors, are required to attend a compulsory site induction. This will include a section on key environmental sensitivities, including the identification and potential presence of Koalas.
- Targeted environmental awareness training will be provided to individuals or groups of workers with a specific authority or responsibility for environmental management or those undertaking an activity with a high risk of environmental impacts, including vegetation clearing controls.
- Toolbox talks will be used to raise awareness and educate personnel on construction related environmental issues, and to ensure environmental awareness continues during construction. Toolbox talks will be tailored to specific environmental issues including:

- biodiversity values and conservation areas
- Koala management
- emergency and spill response
- The daily pre-start meeting will be conducted for the site workforce before the commencement of work each day (or shift) or where changes occur during a shift. The environmental component of pre-starts will include any environmental issues that could potentially be impacted by, or impact on, the day's activities, including vegetation clearing.

6.6.3 Operational Phase

Education programs are the principal means by which the community can gain a full appreciation of relevant issues and the actions which they can undertake to aid koala conservation within the action area.

A local resident education and awareness campaign will be carried out which will include information on:

- Potential Koala habitat and Koala presence within the Gilead community
- the need to drive with caution throughout the Mt Gilead community (refer to road signage and traffic calming devices in Section 5.3)
- process of managing injured Koalas, including contact details for WIRES;
- best practices for dog owners, including:
 - raising awareness of the impact of dogs on Koalas;
 - increased risk of dog attacks during koala breeding season (mid-August through to mid-summer);
 - use of on-leash and off-leash areas;
 - encouraging dog owners to restrain or confine their dog and notify WIRES if a Koala is found within their property.
- Opportunities to participate in Koala habitat restoration/tree planting days in Biobank sites and open space areas (**Figure 9**)

Education and awareness campaigns should recur during the koala breeding season (August to February), when koalas are more likely to be moving about and come into contact with the community.



Figure 9: Potential Community Involvement activities involving Koala habitat restoration (Image courtesy CCC)

7. Funding

Condition 7 requires that this KMP must include provisions for the approval holder to contribute at least \$50,000 each year for 5 years to fund Koala management activities in the proposed ‘action’ area (Urban Area, Detention Basin, Open Space Landscape areas & Open Space areas) as shown in **Figure 1**.

Estimates of the cost to implement the management actions outlined in Section 5 within the action area are provided in **Table 4**. Total estimate of Koala management costs within the action area for 5 years is **\$4,911,986** representing an average funding of \$982,397 each year.

Table 4: Estimate of Koala management costs – Action Area

Action Area	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	Total
	Actual	Actual	Forecast	Forecast	Forecast	Forecast	
Contractor Awareness Training	\$ 2,500	\$5,000	\$1,500	\$1,500	\$1,500	\$1,500	\$13,500
Fencing of construction areas (fauna)		\$102,498	\$30,000	\$10,000			\$142,498
Landscape Planting in open space areas							
Community Education/ Involvement Programs			\$10,000	\$10,000	\$10,000	\$10,000	\$40,000
Sub Total	\$2,500	\$107,498	\$41,500	\$21,500	\$11,500	\$11,500	\$195,998

Additional Management Actions (Action Area)	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	Total
	Actual	Actual	Forecast	Forecast	Forecast	Forecast	
Koala Monitoring	\$68,720	\$50,461	\$50,000	\$50,000	\$50,000	\$50,000	\$319,181
Koala underpasses to Appin Road			\$4,000,000				4,000,000
Additional koala protection fencing to conservation areas			\$109,000		\$63,700	\$97,600	\$270,300
Additional fencing (Appin Road) within Action Area							
Bushland regeneration (Koala Habitat)				\$214,205	\$71,402	\$71,402	\$357,009
Sub Total	\$68,720	\$50,461	4,159,000	\$264,205	\$185,102	\$219,002	4,946,490
Total Management Action Costs (Action Area)	\$71,220	\$157,959	\$4,200,500	\$285,705	\$196,602	\$230,502	\$5,142,488

Estimates of the cost to implement the management actions outlined in Section 5 within the conservation area are provided in **Table 5**. Total estimate of Koala management costs in the conservation area for 5 years is **\$880,818**, representing an average funding of \$176,164 each year.

Table 5: Estimate of Koala management costs – Conservation Areas

Conservation Area	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	Total
	Actual	Actual	Forecast	Forecast	Forecast	Forecast	
Active management of dense wood weed understory/Bell Miner dieback control			\$17,000	\$2,000	\$2,000	\$2,000	\$23,000
Management of Koala habitat in Biobank sites (Amounts from registered Biobank Agreements Management Plans)	\$244,162	\$129,735	\$192,115	\$147,881	\$135,925	\$78,665	\$928,483
Sub Total	\$244,162	\$129,735	\$209,115	\$149,881	\$137,925	\$80,665	\$951,483

Additional conservation Measures (Conservation Area)	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	Total
	Actual	Actual	Forecast	Forecast	Forecast	Forecast	
Koala monitoring					\$10,000	\$10,000	\$20,000
Sub Total					\$10,000	\$10,000	\$20,000
Total Management Action Costs (Conservation Area)							
	\$244,162	\$129,735	\$209,115	\$149,881	\$147,925	\$90,665	\$971,483
Total Management Action Costs within Revised Plan							
	\$315,382	\$287,694	\$4,409,615	\$435,586	\$344,527	\$321,167	\$6,113,971

8. Responsibility

Responsibility for the implementation of the management actions during design, construction and operational phases that are described in section 5 are shown in **Table 6**.

Operational actions relating to the Biobank Sites will be undertaken by Mount Gilead Pty Ltd until 2025; thereafter by CCC.

Table 6: Environmental management roles and responsibilities

Role	Responsibilities
Project Manager	<ul style="list-style-type: none"> • Ensure all works comply with relevant regulatory and Project requirements • Ensure the requirements of this KMP are fully implemented • Ensure all personnel and contractors have completed a site induction and orientation • Provide adequate resources (personnel, financial and technological) to ensure effective development, implementation and maintenance of this KMP • Ensure that all personnel receive appropriate induction training • Stop work immediately where there is an actual or potential risk of harm to Koalas.
Construction Manager	<ul style="list-style-type: none"> • Plan construction works in a manner that avoids or minimises impact to Koalas • Ensure the requirements of this KMP are fully implemented • Ensure construction personnel manage construction works in accordance with statutory and approval requirements • Ensure Koala management and protection measures are implemented • Ensure all Project personnel attend an induction prior to commencing works • Liaise with government authorities as required, • Stop work immediately where there is an actual or potential risk of harm to Koalas
Environmental Manager	<ul style="list-style-type: none"> • Conduct site environmental inspections • Investigate and review nonconformances and identify, implement and monitor corrective and preventative actions for nonconformances. • Prepare written Corrective Action Reports within 1 working day of the identification of a need for corrective actions to be taken (Appendix B); • Maintenance of training, nonconformance and complaints registers. • Undertake or coordinate environmental monitoring events. • Undertake scheduled and non-scheduled audits.
Project ecologist	<ul style="list-style-type: none"> • Manager Koalas during tree clearing in accordance with the Koala Tree Clearing Protocol (Appendix C) • Possess suitable fauna licences and permits • Provide Koala tree clearing report

9. Implementation

9.1 Hold points

Key environmental hold points to be satisfied before works can progress to the next phase, is included in **Table 7**.

Table 7: Hold points

Hold point	When
Revised KMP endorsed by Minister	Prior to commencement of works

9.2 Monitoring

Regular environmental inspections are to be undertaken of all work activities relevant to this KMP being carried out during the construction phase as outlined in the Mt Gilead CEMP. Inspections shall be carried out in conjunction with personnel responsible for a particular work area and shall include the following:

General

- Daily Inspections – site supervisory staff as part of their daily duties shall conduct daily inspections of the site (incl. all subcontractor activities), and issues noted in daily diaries if applicable, and
- Regular Site Inspections – formal inspections recorded on the Environmental Site Inspection Checklists which shall include cover aspects which present significant risk to Koalas as described in this KMP. Corrective actions arising from inspection are to be managed and implemented within clearly defined timeframes.
- Where a site condition does not comply, a Corrective Action Report (CAR) is to be completed and actioned within one working day of being raised.

Koala monitoring

- Pre-clearance surveys (**Appendix E**)
- Action area and Koala corridor monitoring (**Appendix F**)
- Fauna underpass monitoring (**Appendix I**).

10. References

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Eco Logical Australia 2018d. *Biobank Agreement Credit Assessment Report – Noorumba-Mt Gilead-Biobank Site*. Report prepared for Mt Gilead Pty Ltd, April 2018.

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Appendix A Final decision notice for EPBC 2015/7599 and conditions of Approval

Provided as a separate Pdf document.

Appendix B DotEE Approval of Koala Management Plan December 2019

Provided as a separate Pdf document.

Appendix C Evidence of retirement of Koala Credits

Copy of advice provided to DoTEE on 31 October 2019.

From: Anderson, Mark (Australia) <Mark.Anderson@lendlease.com>

Sent: Thursday, 31 October 2019 1:31 PM

To: Tony Dowd <Tony.Dowd@environment.gov.au>

Cc: Humphries, Robert <RobertH@ecoaus.com.au>

Subject: FW: Confirmation of the securing of the compensation measures for EPBC 2015/7599 Conditions 5

Tony,

This email serves as notice and evidence the necessary offsets for EPBC 2015/7599 Conditions 5, required pursuant to Condition 6 of EPBC 2015/7599.

Please find attached the credit retirement report (summary below) confirming the securing of the necessary compensation measures for EPBC 2015/7599 Condition 5

Regards, Mark Anderson , Senior Development Manager, Communities

mark.anderson@lendlease.com | www.lendlease.com

Credit Retirement Report: 2019-TR-479 (EPBC SUMMARY)

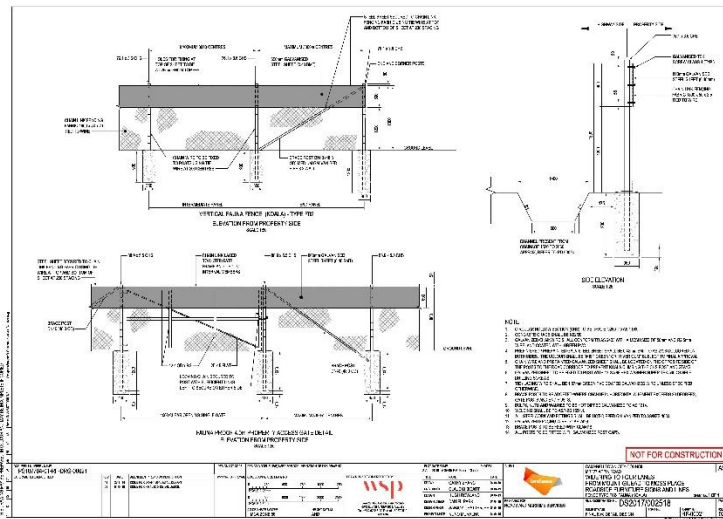
Credit owner(s): Lend Lease Communities (Mt Gilead) Pty Ltd (Lend Lease)

Species credits

Agreement ID & NAME	Location	Credit ID	Scientific name	Common name	Credits retired	Area	Condition satisfied
215 Appin West	Offsite	459	Phascolarctos cinereus	Koala	150	21.13 ha	EPBC 2015/7599 - Condition 5
208 Macarthur-Onslow	On-site	442	Phascolarctos cinereus	Koala	85	11.97 ha	Not required for EPBC approval
209 Noorumba-Mt Gilead	On-site	909	Phascolarctos cinereus	Koala	48	6.76 ha	Not required for EPBC approval
239 Noorumba Reserve	Off-site	516	Phascolarctos cinereus	Koala	151	21.27 ha	Not required for EPBC approval

Appendix D Koala corridor and Biobank fencing examples

Permanent Koala exclusion fencing around Koala corridors as shown in Figure 5



Example Post and cable fencing around internal offset areas (Hillsborough Biobank site)



Appendix E Koala Tree Clearing Protocol

This Protocol provides methodology for Koala tree pre-clearance and relocation for implementation during the removal of trees.

Qualifications of ecologist

A suitably qualified fauna ecologist with experience relating to arboreal fauna will be required to be on-site to supervise the felling of all trees. The ecologist will hold a scientific licence from NSW Office of Environment and Heritage (OEH) to conduct flora and fauna surveys. This licence requires that all survey and incidental records are submitted to the OEH for inclusion in their databases (primarily the Atlas of NSW Wildlife).

Fauna ecologist is to take all appropriate hygiene pre-cautions before handling any fauna to prevent spreading diseases.

Pre-clearance survey

Early in the morning of the day of the proposed clearing, trees to be cleared must be inspected by the fauna ecologist for the presence of Koalas. These inspection may use drones to assist identify fauna in tall and/or dense trees where visibility from the ground is obscured. The following scenarios must be followed:

- Where Koalas are identified within a tree, tree clearing work will not proceed on that day, or until the Koala has voluntarily moved from the tree (typically, a Koala in this situation will vacate the tree on the same or following day)
- Active relocation (capture and relocation) of Koala is discouraged to avoid causing stress to Koala's unless Koala's are found within active works sites where there is a risk of harm or injury)
- Where Koalas are not identified within the tree, the tree can be cleared using the below felling technique

Felling technique

The fauna qualified ecologist must be present on site while the vegetation is removed to provide advice to machine operators and rescue and relocate any fauna encountered and/or injured during tree felling and clearing in accordance with general injured wildlife and tree clearance protocol in the CEMP (ELA 2019b).

The fauna ecologist will need to work closely with the operators during the felling operations to make sure works are stopped if Koalas are spotted and require rescue. Prior to felling operations, a site specific Safe Work Method Statement (SWMS) will be prepared outlining the risks and hazards of felling operations.

Koala handling

Any Koalas that are unable to relocate themselves on their own accord will be captured and will be released into suitable habitat off-site (such as the Biobank sites) by the fauna ecologist.

If a Koala is injured during the works, the fauna ecologist will ensure that they receive the appropriate levels of care. Depending on the level of injury and status of the injured fauna, WIRES and/or the nearest veterinary clinic are to be contacted to retrieve to take the animal into care or to determine whether the veterinary staff are capable of caring for injured native animals.

Koala pre-clearing records

Records shall be kept by the fauna ecologist detailing the pre-clearing findings, numbers of Koalas observed, including details on any injuries, treatment, and relocation.

Appendix F Koala population monitoring across action and Koala corridors

An annual Koala population monitoring program will be implemented across the action area and Koala corridors as under taken by Wild Conservation 2021 and 2022.

Monitoring report provided as separate Pdf.

Appendix G Figtree Hill Home Design Guidelines (Lendlease May 2019)

Extract from Figtree Hill Home Design guidelines regarding fencing of home lots to be dog proof

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Fencing

Fencing that is well designed has a positive impact on your home and street. Generally it is preferred that your landscape flows from the street to the front of your home, however, if fencing forward of your home creates usable outdoor space, you may choose to fence the space in a way that adds quality and activation to the street.

All fencing is subject to Council requirements and Lendlease approval.



Typical front fencing



Side and rear boundary fencing



Corner lot fencing

Front fencing, where desired forward of your home, is required to be:

- A minimum height of 900mm and a maximum height of 1.2m. Any required railing should be included when calculating these heights.
- The minimum acceptable front fencing specification is 100mm x 100mm dressed timber or metal posts with flat bar metal palisade infill. The infill must be at least 50% transparent.
- Acceptable materials also include painted or stained timber with exposed posts and panels that are either painting or metal flat bar panels up to 1.2m high.
- Heritage reproduction styles (pickets) are not permissible.
- On corner lots, the front fence is to continue around the corner on the secondary street frontage to meet with the required corner lot fencing.

Fencing fronting a secondary frontage or public open space is required to be:

- Maximum height of 1.8m including railing.
- The corner lot fencing specification is 100mm x 100mm square hollow section (SHS) Colorbond posts, with either vertical or horizontal slats in either HA, treated, dressed and painted pine, red wood or metal in a colour to complement your home. Slats are to be spaced at between 50mm and 100mm. All posts and rails are to be installed internally to face the lot, leaving a smooth finish to the external face of the fencing. This style must return to the dwelling.
- Corner lot fencing on the secondary street frontage is to extend to a maximum of 5m behind the main front facade.
- The side and rear boundary style of fencing is not permitted in this location.

Internal Boundary Fencing is required to be:

- Maximum 1.8m high in 1.5m wide 'Steersmaster' or equivalent profile in Woodland Grey Colorbond colour. Always consult your neighbour prior to installation.
- Fencing not visible from the street should match the standard fence as specified above.
- This fence must finish 1.5m from the front boundary of the home and return to the side wall of the home. Where a front fence is proposed, the side fence height must drop at the front building line of the home to the front fence height.

Fencing by Lendlease:

- Where indicated on the Building Envelope Plan, Lendlease will build fence decorative fencing along open space boundaries, project boundaries and high profile lot boundaries. This fencing cannot be altered, removed, damaged or modified in any way without prior written approval by Lendlease.

Appendix H Example signage showing prohibition of certain activities in Council Reserves

Example Council Reserve Signage



The signage is a vertical rectangular panel with a dark green background. At the top right is the 'Bushcare' logo, which features a stylized plant and the word 'Bushcare' in a serif font. The main text is in large, white, sans-serif font, reading: 'You are entering Smith's Creek Reserve – a Critically Endangered Vegetation Community'. Below this text are two circular images: the top one shows a koala clinging to a tree trunk, and the bottom one shows a close-up of a tree branch with small white flowers. To the left of the koala image is a paragraph of text. Below the koala image is another paragraph of text. Below that is a third paragraph of text. At the bottom left are three logos: Campbelltown City Council, NSW Government, and Local Land Services. At the bottom right is a dark green horizontal bar with white text.

**You are entering
Smith's Creek
Reserve – a Critically
Endangered Vegetation
Community**

Smith's Creek Reserve is home to many special species of plants and animals, including koalas (*Phascolarctos cinereus*).

Campbelltown City Council, in partnership with the local community and Greater Sydney Local Land Services, is currently undertaking bush regeneration works to remove weed species and help improve koala habitat within the reserve.

We ask that you respect the work being done to improve the reserve, and be mindful of the impact of your activities.

If you'd like to help by joining the Smith's Creek Bushcare Group, please contact Council's Environment Unit on 4645 4601.

SIMMOS BEACH RESERVE



LEGEND

- THE SIMMOS TRACK
- NORTH RIVER TRAIL
- WATERGUM WALK
- SOUTH RIVER TRAIL
- QUARRY WALK
- UNIMPROVED TRACKS
- PERMITS TRAILS
- SHEDS
- PICNIC AREA
- CAR PARK
- BEACH
- PLAYGROUND
- WATER
- TOILETS

THE SIMMOS TRACK Circuit 3.9km | 1hr 40min
 Grade 2 - Bushwalking experience recommended, long length formed track with some steps and steep inclines. Explore all corners of Simmos Beach taking in the Georges River and the diverse sandstone vegetation along the riparian - you will see the reserve in all its glory and might even see a Koala (at your own discretion).

NORTH RIVER TRAIL Circuit 2.4km | 1hr
 Grade 2 - Suitable for families, medium length formed track with some steps and short inclines. Follow the riparian banks downstream along the Georges River taking in the beauty of the riparian sandstone cliffs as you stroll so vegetation and keep your eyes peeled for Platypus (Perithymia platypus) in the river.

WATERGUM WALK Circuit 0.8km | 30min
 Grade 2 - Suitable for families with young children, short length formed track with some steps and steep inclines. Take a short stroll through the natural hinterlands of the Watergum (Banksia forest) and enjoy the views through the undulating river to ridge-top native vegetation.

SOUTH RIVER TRAIL Circuit 2.6km | 1hr 10min
 Grade 3 - Bushwalking experience recommended, medium length formed track with some steps and steep inclines. Head upstream through the Grey Myrtles (Blackwood) riparian and enjoy the mirrored reflections of the large Grey Gum (Eucalyptus punctata) trees across the Georges River - you might even see a Swamp Wallaby (MacPuckia macpuckii).

QUARRY WALK Circuit 1.2km | 30min
 Grade 2 - Suitable for families with young children, short length concrete path with some elevation. Follow the easy grass concrete path as it winds its way through the untouched sandstone vegetation to the site of the old Simmos Beach sandstone quarry that was restored to recreational parking in 1970.

Simmos Beach Reserve is one of Campbelltown's most valued assets, striking the perfect balance between conservation and recreation.





Remnant or traditional Aboriginal lands and the home of the people of the Georges River, the reserve is rich in local history and home to the renowned cooking and community as well as many threatened plants and animals, all of which are protected under both state and federal legislation.





The reserve was officially opened in 1980 by Campbelltown City Council, with a commitment to conserve and improve a natural locality, while providing a key recreational asset to the Campbelltown community. Since its opening, ongoing improvements have been made including the installation of picnic and playground facilities, a sandy beach, the restoration of the quarry area and a network of popular walking trails.



The name Simmos Beach celebrates the local family of settlers in the area, the Simmos, who occupied the reserve during the mid-1800s prior to it being purchased by a conservative and progressive group.


www.campbelltown.nsw.gov.au
 To report illegal activity, please call Campbelltown City Council on 4845 4000


SIMMOS BEACH RESERVE














THE SIMMOS TRACK 3.9km  


CANOE LAUNCH + CAR PARK 950m 

SIMMOS BEACH + CAR PARK 800m 




PLAYGROUND 800m 






BEACH PICNIC AREA + CAR PARK 600m 

QUARRY PICNIC AREA 400m 

QUARRY LOOKOUT PICNIC AREA 300m 

Simmos Beach Reserve is open from 7am to dusk 7 days a week. For the comfort and safety of all visitors to the reserve, please observe all the signage and take reasonable care. The following activities are prohibited in this public place unless approved by Campbelltown City Council. Penalties may exceed \$110 in accordance with the Local Government Act 1993.

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Image courtesy CCC

Appendix I Fauna Underpass monitoring

Roads and Maritime Service Appin Road fauna underpass monitoring program provided as a separate Pdf.

