

**Submission
No 83**

**INQUIRY INTO PLANNING SYSTEM AND THE IMPACTS
OF CLIMATE CHANGE ON THE ENVIRONMENT AND
COMMUNITIES**

Organisation: Save Sydney Koalas

Date Received: 3 November 2023



Save Sydney's Koalas is a Sydney wide grassroots organisation that was formed to advocate for the protection of the South West Sydney koala population, the last significant population of chlamydia free koalas left in Sydney, if not NSW.

As such, the greater Macarthur region koala population is extremely important to the survival of the species in NSW.

An Upper House Inquiry into Koala Populations and Habitat in New South Wales in 2020, made 42 Recommendations , including recommendation 11 “ That the New South Wales Government factor in climate change as a key consideration in the drafting of all relevant legislation and planning strategies and ensure climate change mitigation is a core component of all strategies to save the koala in New South Wales”

Save Sydney's Koalas (SSK) wishes to alert the Committee to serious problems with the integrity of the development approval processes that were put in place to facilitate the rapid release of land earmarked for urban development in South West Sydney including the absence of any planning strategy to address climate change or urban heat. Approvals include the Greater Macarthur Growth Area, Stage 1 and 2 Mount Gilead as well as the Cumberland Plain Conservation Plan.

This submission will focus on the planning shortfalls of Mount Gilead Stage 2 Biodiversity Certification Assessment Report and Biodiversity Strategy.

The repercussions of this approach, especially with respect to the reputations of the NSW state government and leading Australian property developers like Lendlease, are already being felt. Australian Ethical, for example, one of Australia's leading superannuation funds, recently decided to divest its debt and equity positions in the Lendlease Groups and related vehicles.

In its [press release](#) of March 2023, the super fund accused both Lendlease and the Department of Planning (DPE) of deliberately misleading the public about how Lendlease's proposed conservation measures would guarantee the protection of the Campbelltown Koala population:

Ultimately, if the housing development goes ahead as proposed, we believe we won't know if the koalas will be adequately protected... We have serious concerns about the way the reports from the OCSE are being interpreted by the NSW

Department of Planning & Environment (DPE) and Lendlease and the lack of transparency around public consultation to date...The public hasn't been given the full picture. Our fear is that this development will be approved without proper public consultation on the environmental impacts. ([Why we divested from Lendlease](#)).

To put Australian Ethical's decision into context, the super fund was a long-term investor in Lendlease and had spent the last four years in dialogue with the company over its plans to create approximately residential 3,300 lots as part of the second stage of its development on the historic Mount Gilead property. The decision to divest its \$11 million stake in the company was made only after Lendlease failed to comply with Australian Ethical's request for critical information about planned koala corridors.

Our list of serious concerns about the current environmental approval process, as discussed below, is lengthy but not exhaustive.

We think legitimate questions should be asked about how state governments can be seemingly so obsequious in dealings with property developers.¹

The potential of large-scale projects like the Mount Gilead housing estate to generate jobs and growth and increase the housing supply is obviously important. But accelerating development approvals to meet these objectives should never come at the expense of the public interest in securing good long-term planning and environmental outcomes, especially in such environmentally sensitive areas.

The region experiences bushfires, flood events, searing temperatures, a reliance on air conditioning, poor air quality- continuing rampant over development will only make living in the area more uncomfortable “Western Sydney is ground zero of an extreme heat crisis that experts warn will cause financial distress, serious illness and even cost lives’ ‘The region, home to about 2.5 million people and projected to grow by 400,000 more by 2030, can be up to 10% hotter than the eastern suburbs during a heat wave”.²

¹ A recent article in the Guardian Australia, [Sydney's growing pains: land rezoning a potential billion-dollar deal for developers after local council sidelined](#) by Anne Davies 22 February 2023, raised questions about reported ties to developers by the former planning minister, Anthony Roberts MP and his circle. In the same article, the independent mayor of Wollondilly, Matt Gould, accused the then NSW government of putting “billionaire developer interests before the needs of the community to the detriment of current and future Wollondilly communities and the endangered koala population”.

² Are you one of the 2.5 million Australians doomed this summer? News.com.au

List of serious concerns about the development approval processes for the Mount Gilead Stage 2 Biodiversity Certification Assessment Report and Biodiversity Strategy

Executive Summary

The previous public consultation on the development is redundant from a biodiversity perspective because the public hasn't been given the full picture. Our fear is that this development will be approved without proper public consultation on the environmental impacts. The Minister needs to ensure there is a transparent public consultation because, as it stands, we cannot be confident that this koala colony will survive the developments proposed for the area. [Australian Ethical divests from Lendlease claiming 'lack of transparency' about koala corridors](#) by Tim Fernandez, ABC, 13 March 2023

Lack of transparency and conflicting advice about whether the proposed Koala habitat corridors on Mount Gilead Stage 2 (MGS2) are in line with recommendations made by the Office of the Chief Scientist and Engineer (OCSE) is repeatedly referenced in this document.

This example, perhaps more than any other, puts a spotlight on the fault lines in the development approval processes designed by the previous state government. It reveals a disturbing pattern of discounting and/or misinterpreting the OCSE advice both in the MGS2 [Biodiversity Certification Assessment Report and Biodiversity Strategy](#) 15 November 2022 (BCAR&BS) and in a number of the review documents prepared by divisions within the Department of Planning (DPE) or the Campbelltown City Council.

This problem has been exacerbated by what looks like a willingness within some sections of DPE and the Campbelltown Council to either too readily trust documentation provided by the proponent or to gloss over the absence of required and important information.

As the analysis below will highlight, the above situation is not just confined to determining the adequacy of environmental protections for biodiversity in the area. Significant decisions about the scale and shape of the proposed residential development are also being determined on the same basis.

With respect to MGS2, some of the major problems are:

- The lack of a legislative requirement for the developer proponent to appoint an independent ecological consultant to prepare the Biodiversity Certification

Assessment application. The author of the MGS2 BCAR&BS, the ecological consultant Eco Logical Australia, has a long history of securing ongoing work from Lendlease. The ongoing relationship creates a potential conflict of interest and has led to complaints from other ecological experts about Eco Logical's perceived lack of objectivity.³

- The likely lack of resources and expertise within local governments to fund and conduct an independent assessment of submissions after important biodiversity and planning documents are placed on public exhibition. Presumably, this was one of the reasons why Campbelltown Council used the proponent's consultant, Eco Logical, to review almost 700 objections to the MGS2 BCAR&BS.
- An overreliance on private developers to facilitate the delivery of critical infrastructure to support new development. This may explain why Transport for NSW's (TfNSW) commissioned Lendlease to prepare on its behalf the [Addendum Report on the Environmental Factors](#), November 2022 (Addendum REF) for the proposed modification of Appin Road upgrade from Mount Gilead to Ambervale. Lendlease recently agreed to fund the inclusion of two fauna crossings under Appin Road and fauna fencing on the eastern side of Appin Road, necessitating the need for an Addendum REF.
- enthusiasm for encouraging large-scale greenfield development to commence before biodiversity offsets and essential infrastructure like roads, schools and community facilities are properly planned and delivered. Lendlease's irrevocable offer to enter into a Planning Agreement for essential infrastructure with the Minister for Planning, for example, only includes "the dedication of land for a school with the location of the school [to] be refined with the Department of Education and Council as part of the preparation of the detailed masterplan and negotiation of the Planning Agreement."⁴ Given that a school is required to support an anticipated

³ See, for example, Dr Steve Phillips' response to the Eco Logical report, *Mt Gilead Koala Carrying Capacity*, prepared on behalf of Lendlease, where he says:

At the outset, we were surprised by the lack of objectivity evidenced in this report, . (Campbelltown City Council, [Agenda, 13 October 2020](#), page 63)

⁴ The MGS2 [Gilead Planning Proposal](#) (30 September 2022), prepared by GLN Planning on behalf of Lendlease, heralds the scale of its proposed new Planning Agreement with the Minister of Planning: *In anticipation of progressing the rezoning of the Site, Lendlease has lodged an irrevocable offer to enter into enter a new Planning Agreement with the Minister for Planning to deliver regional scale public infrastructure on behalf of the State Government for Lendlease's development at Figtree Hill and Gilead. This offer provides for the delivery of roads, biodiversity protection works and land for a new school with a combined value of nearly \$224M...It is intended that this planning agreement will make satisfactory arrangements for State public infrastructure in lieu of the draft SIC being adopted.*

combined population of 15,000+ residents across MGS2 and Figtree Hill Estate (MGS1), which is already under development, surely it should be planned for and provided upfront?

(For other examples of the consequences of this misguided approach to the delivery of essential community infrastructure, see [No schools and no services but houses keep going up](#), by Jordan Baker, Sydney Morning Herald, 15 October 2022.⁵ For examples of the failure of the NSW Biodiversity Offset Scheme to guarantee the timely delivery of required biodiversity offsets, see the report of the [Legislative Council's Inquiry into Integrity of the NSW Biodiversity Offsets Scheme](#), 22 November 2022.)

- The previous government's desire to facilitate the speedier approval of statutory rezonings through the establishment of the [Technical Assurance Panel \(TAP\) pilot program](#), which has now morphed into [Rezoning Pathways Program](#) and is being used to fast-track the rezoning of MGS2 within the Gilead Precinct and Walker Corporation owned land within the Appin Precinct.⁶

To be fair, the objectives of the TAP pilot program with respect to the MGS2 planning proposal appear sound:

- *protect koala corridors and provided habitat revegetation;*
- *implement the recommendations of the OCSE's report, [Advice on the protection of the Campbelltown koala population](#);*
- *align them to the (then) draft Cumberland Plain Conservation Plan;*

⁵ From [No schools and no services but houses keep going up](#) by Jordan Baker, Sydney Morning Herald, 15 October 2022:

'Here's what's missing - everything'

While there were plenty of homes for all those families and kids, it became clear to Libby Clarke that there wasn't much else. The public primary was the size of a country school and now has 19 demountables. The closest shops were 20 minutes away; if she forgot milk, it was a 40-minute round trip, often in traffic. Trains came hourly, even at the peak. Narrow roads were choked. The hospital repeatedly promised for nearby Rouse Hill didn't exist, and still doesn't. Meanwhile, the population grows exponentially.

⁶ A recent article in the Guardian Australia, [Sydney's growing pains: land rezoning a potential billion-dollar deal for developers after local council sidelined](#) by Anne Davies, 22 February 2023, questioned why the previous state government was intent on pushing so much development into areas with "no public transport, inadequate water supplies and endangered Koala habitat." The article noted that serious concerns about the viability of the MGS2 and the Walker developments, in particular, have been raised by other arms of the state government including EHG, TfNSW, Water NSW and the Department of Health.

- *adopt the Government Architect's (then) draft Connecting with Country Framework;*
- *and investigate required enabling infrastructure to support the draft proposals⁷*

But the delivery of these objectives has been compromised by the failure to include TAP representatives from relevant government bodies (eg Water NSW and Heritage NSW) and to allow competing priorities, like the speedy delivery of new housing supply, to seemingly dominate TAP decision-making considerations.⁸ The final [TAP Advice](#), for example, shared the following information with Lendlease:

Further, the analysis of housing supply in the Western City District undertaken as part of the TAP program found the current planned housing supply across the District, including the Wilton and South West Growth Areas, would not keep up with housing demand for the Western Parkland City. This shortfall was demonstrated prior to 2036 and was projected to increase significantly before 2041.⁹

- The failure to exhibit the [Planning Proposal for Mt Gilead Stage 2](#) (Gilead Planning Proposal) and the BCAR&BS concurrently. The Gilead Planning Proposal was publicly exhibited in December 2022, a full two years after the BCAR&BS was put on public exhibition.

To justify the rationale for not exhibiting these documents at the same time, the [DPE NSW Gateway determination report: Planning Proposal Gilead Stage 2](#) (22 November 2022) notes that biodiversity certification of the site is subject to a separate legislative process:

As noted above in this report, [Campbelltown] Council is currently progressing an application for bio certification of the site. A copy of that application accompanied the planning proposal as a part of the supporting documentation. For clarity, submissions are not being sought on this matter

⁷ DPE, [Review of the Technical Assurance Panel Pilot Program for the Greater Macarthur Growth Area](#) (September 2022), page 12.

⁸ Media reports suggest that the Technical Assurance Panel's (TAP) independence may have been compromised by its overreliance on the Atlas Urban report on housing supply in the Western City District, which was commissioned by the Walker Corporation. See [Sydney's growing pains: land rezoning a potential billion-dollar deal for developers after local council sidelined](#) by Anne Davies, 22 February 2023.

⁹ [TAP Advice](#). Letter from Catherine Van Laeren Chair, Technical Assurance Panel, to Brendan O'Brien Head of Strategic Planning, Residential Communities Lendlease, 21 September 2022.

*as bio certification is subject to a separate legislative process to the planning proposal.*¹⁰

But the pitfalls of not ensuring that the documents were exhibited together were highlighted in a 19 December 2022 letter from Louisa Clark, Director, Greater Sydney Biodiversity and Conservation, EHG, to Adrian Hohenzollern, Director, DPE Metro West ([EHG Advice](#)) regarding the Gilead Planning Proposal:

*It is also important to note that EHG's assessment of the amendment application [ie an updated BCAR&BS] will have implications for the proposal including the boundaries of the proposed urban development footprint and land uses in the structure plan. It will also form the basis of EHG's advice to the Minister for Environment and Heritage on whether re-exhibition of the application is warranted.*¹¹

In fact, the EHG “formed the view that insufficient information has been provided to inform the [planning] proposal and the indicative structure plan,” and said that the public exhibition of the Gilead Planning Proposal should have been placed on hold until a review was undertaken of the amended MGS2 BCAR&BS including the report on public submissions. Similarly, [Water NSW argued in its public submission](#) on the Gilead Planning Proposal that land set aside for conservation and open space in the Indicative Structure Plan for MGS2 did not provide sufficient protection for the state heritage-listed Upper Water Canal.¹²

Whether the Gilead Planning Proposal and/or the MGS2 BCAR&BS will be re-exhibited remains to be seen. The 16 November 2022 [Gateway Determination announcement for MGS2](#) presented a very tight timetable for the approval of the rezoning of the Gilead Stage 2 site for urban development and conservation purposes, stating that amendments to the Campbelltown Council Local Environment Plan (LEP) should be completed on or before 17 July 2023.¹³

¹⁰ [DPE Metro West Gateway Determination Report, Gilead Stage 2](#) by Gary Hindler, Senior Assessment Officer, DPE Metro West, and Adrian Hohenzollern, Director, Metro West (15 November 2022).

¹¹ [EHG Advice](#). Letter from Louisa Clark, Director, Greater Sydney Biodiversity and Conservation, EHG, to Adrian Hohenzollern, Director, DPE Metro West, 19 December 2022, page 1.

¹² Water NSW, Public Submission re Planning Proposal Stage 2 (15 December 2022).

¹³ [Gateway Determination announcement for MGS2](#) by Tim Raimond, Deputy Secretary Planning and Land Use Strategy, Department of Planning and Environment, Delegate of the Minister for Planning (16 November 2022).

The need to secure optimal and detailed mapping for the Koala habitat corridors on MGS2 and throughout the Greater Macarthur and Wilton Growth Areas (GAs) cannot be underestimated.

Back in 2019, the NSW DPE 2019 report, [Conserving Koalas in the Wollondilly and Campbelltown Local Government Areas](#), provided a very frank assessment of how the Koala population will likely fare from the planned massive urbanisation of the GAs:

Notwithstanding the implementation of measures to avoid, minimise and reduce impacts, major residential development in the GAs would result in:

- *the direct loss of core and supporting koala habitat, and potentially habitat fragmentation, resulting from the upgrade of existing principal roads into the new residential areas, as well as from new roads and other urban development*
- *an increased urban interface with koala populations*
- *increased traffic volumes*
- *increased indirect impacts to koala habitat through more frequent fire, weed incursion, feral pests, domestic animals, light spill, noise and rubbish dumping.*¹⁴

The importance of protecting this still healthy and expanding Koala population was subsequently highlighted in the [Legislative Council's Inquiry into Koala populations and habitat in NSW](#) and the OCSE reports commissioned by the previous state government.

The OCSE's first report, [Advice on the protection of the Campbelltown Koala population Koala Independent Expert Panel 30 April 2020](#) (OCSE First Koala Report), for example, noted the increasing comparative importance of the Campbelltown population to the survival of the species in NSW:

*The Macarthur region is host to a historically continuous population of koalas, known as the Campbelltown population. The population of between 250 and 500 individuals is surviving in a landscape that is predominantly native bushland that is connected to rural farmland or peri-urban environment in the vicinity of the Greater Macarthur area. The Campbelltown population is one of the few remaining populations in the Sydney region. **The population is considered to be healthy and***

¹⁴ NSW DPIE, [Conserving Koalas in the Wollondilly and Campbelltown Local Government Area](#) (October 2019), page 25.

*uniquely Chlamydia free. The impact of the widespread 2019/20 bushfires across NSW has increased the comparative importance of this koala population.*¹⁵

This report also singled out the “critical” role played by the Koala habitat corridors on the Mount Gilead property in facilitating "the movement of koalas such that dispersing koalas can move through the landscape, can breed to ensure genetic diversity, and can access refugia in times of stress, drought or other threats":

*It is the functional role that habitat in Mount Gilead site plays in connecting the north end of the Nepean Corridor in an easterly direction that means protecting corridor structures at MGS2 is critical, preventing an isolated population at Nepean.*¹⁶

Obviously, ensuring the protection of the Campbelltown Koalas is of paramount importance, but as the following list of serious concerns highlights, not urgently taking steps to address the deeply flawed development approval processes will likely make the area equally as unliveable for existing and future residents as well.

Concern 1

The lack of transparency and objectivity in the public consultation process, mainly due to Campbelltown City Council's appointment of the developer's consultant, Eco Logical, to prepare the response to the public submissions.

Campbelltown City Council commissioned the consultant Eco Logical Australia Pty Ltd, the author of Lendlease's Mount Gilead Stage 2 [Biodiversity Certification Assessment Report and Biodiversity Strategy](#), 15 November 2022 (MGS2 BCAR&BS), to prepare a response to the almost 700 objections. (See [Response to Public Submissions](#), 13 September 2022).

Campbelltown Council's Acting Executive Manager, Urban Release and Engagement City Planning and Environment, also prepared an executive summary of the public submissions (Campbelltown Council Officer's Report) for the [11 April 2023 Agenda of the Ordinary Council Meeting](#).

Neither of the above documents provides an objective analysis of the issues raised in the public submissions. Most of the replies to criticisms of the draft MGS2 BCAR&BS in the

¹⁵ OCSE, [Advice on the protection of the Campbelltown Koala population, Koala Independent Expert Panel](#), 30 April 2020, (OCSE First Koala Report), page iv.

¹⁶ Ibid, page vii.

Response to Public Submissions, for example, rely only on advice from [DPE Metro West](#), which is either misleading or has been misrepresented by Eco Logical.¹⁷

With respect to the Koala habitat corridors, for example, the Response to the Public Submissions says:

DPIE advised Lendlease in December 2021 that the details regarding koala corridors at Gilead as recommended by the CS&E were now resolved (Appendix D). The Biodiversity Certification Assessment Report has now been updated to ensure the Master Plan is consistent with the advice provided by DPIE (Appendix E).

To claim that "DPIE advised Lendlease in December 2021 that the details regarding koala corridors at Gilead as recommended by the CS&E were now resolved" is incorrect for the following reasons:

1. The [EHG Advice](#) of 19 December 2022 said it had advised DPE Metro West on 21 September 2022 that the MGS2 BCAR&BS needed to be amended, as it was inconsistent with the advice from the Technical Assurance Panel ([TAP Advice](#)) and with the OCSE's Koala Reports.¹⁸ EHG also advised DPE Metro West that it would not be undertaking a detailed review of the MGS2 BCAR&BS until these documents were updated.
2. The EHG Advice noted that the MGS2 BCAR&BS should also include "an assessment of consistency with the OCSE Koala Reports." This assessment, if completed, was not tabled at the Campbelltown Council ordinary meeting of 11 April 2023 when the decision was made to forward the November 2022 version of the MGS2 BCAR&BS to DPE for approval.
3. The omission of the EHG Advice from both the Campbelltown Council Officer's Report and the MGS2 Response to Public Submissions (which appears not to have been updated since September 2022) is deeply problematic. The EHG Advice was publicly available on the [NSW Government Planning Portal](#) before the

¹⁷ DPE Metro West advice includes an *Update to the Greater Macarthur 2040* (December 2021); the *DPE Metro West Gateway Determination Report, Gilead Stage 2* by Gary Hindler, Senior Assessment Officer, DPE Metro West, and Adrian Hohenzollern, Director, Metro West (15 November 2022); and the letter re *Gilead Stage 2 Planning Proposal* from Adrian Hohenzollern, Director, Metro West, to Brendan O'Brien, Head of Strategic Planning, Residential Communities, Lendlease (24 November 2022).

¹⁸ OCSE reports include [Advice on the protection of the Campbelltown Koala population, Koala Independent Expert Panel](#), 30 April 2020 (OCSE First Koala Report); [Response to questions about advice provided in the Koala Independent Expert Panel Report 'Advice on the protection of the Campbelltown Koala population'](#) February 2021 (OCSE Response to Questions about Advice); and [Advice regarding the protection of koala populations associated with the Cumberland Plain Conservation Plan](#) May 2022 (OCSE Second Koala Report).

Campbelltown Council meeting of 11 April 2023, and an article in the Guardian by Lisa Cox, [Australian Ethical offloads Lendlease shares over development threat to koala population](#) (13 March 2023), notes, for example, that "EHG wrote in public submissions that insufficient information had been provided about biodiversity."

Concern 2

The DPE Metro West Advice referred to in the Response to Public Submissions and in the Campbelltown City Council Officer's Report is inconsistent with the advice that Lendlease and DPE Metro West received from the Technical Assurance Panel (TAP), the Office of the Chief Scientist and Engineer (OCSE) and the Environment and Heritage Group (EHG) with respect to the width and design of the Koala habitat corridors.

Lendlease, in particular, has repeatedly cited correspondence with DPE Metro West as evidence for why it does not have to comply with the OCSE's recommendation for a minimum average Koala habitat width of 390 m.¹⁹

Curiously, the letter of 24 November 2022 from Adrian Hohenzollern, Director, Metro West, to Brendan O'Brien, Head of Strategic Planning, Residential Communities, Lendlease, opens by stating that:

*The basis for all koala corridors in the Greater Macarthur Growth Area (growth area), in which the Gilead Stage 2 site is located, is the independent advice and recommendations of the Office of the NSW Chief Scientist & Engineer. The first report (dated 30 April 2020) provided considerations for several potential koala corridors in the growth area. Of particular importance, was the recommendation that koala corridors achieve a **minimum average width of at least 390 m.***

But later in this letter, the recommendation for a minimum average width for the Koala habitat corridors is inexplicably watered down:

*As there are a number of existing constraints, such as the Upper Canal, corridors will be narrow in some areas and wide in other areas. **While there is no minimum width, the overall corridor from 'end to end' must achieve an average width of at least 390 m.***

¹⁹ The letter from Ranisha Clarke, Chief Operating Officer, Lendlease Communities to Diana Pryde, Secretary, Save Sydney's Koalas, of 14 December 2022 attached the 24 November 2022 DPE Metro West letter from Adrian Hohenzollern, Director, Metro West, to Brendan O'Brien, Head of Strategic Planning, Residential Communities, Lendlease.

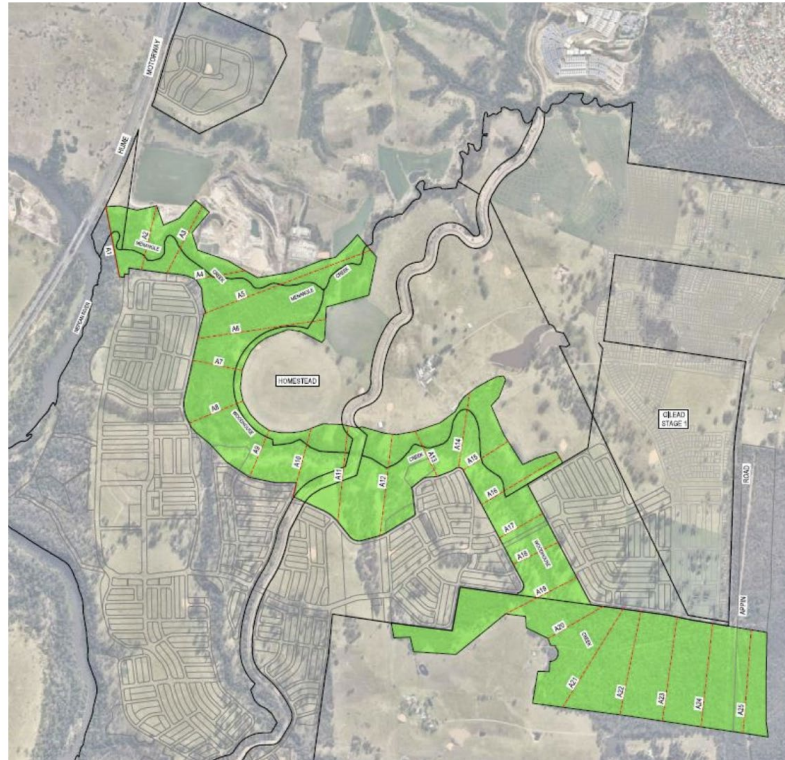


Figure 3: Mt Gilead Biobank Koala Corridor showing measurement lines (source Lendlease)

Source: OCSE Response to Questions about Advice. The OCSE Koala Independent Expert Panel disputed how Lendlease had measured the width of the Woodhouse Creek Koala Corridor (Corridor B), as illustrated in the above diagram showing Lendlease’s measurement lines.

This change in guidance does not align with the recommendations made by the OCSE in its [Response to questions about advice provided in the Chief Scientist's First Koala Report](#) (OCSE Response to Questions about Advice). It questioned, for example, why the proposed design of the Woodhouse Creek Corridor (Corridor B) on MGS2 had not employed the methodology of Dr Steve Phillips, the author of the [Campbelltown City Council’s Comprehensive Koala Plan of Management](#) (CCKPoM). Dr Phillips' methodology prescribed that "an optimum width of 409m–425m be maintained as desirable" and said that:

*The means of which these measures are to be validated must also be transparent and statistically robust, to which end we propose a series of width measurements at 200 m intervals along the entire length of the SLA, each of which must evidence the minimum width requirement of 250 m.*²⁰

²⁰ See [OCSE Response to questions about advice provided in the Koala Independent Expert Panel Report](#) (Response to Questions about Advice) page 9:

The Panel views that the transects as drawn do not provide a realistic reflection of the actual corridor width, as there is no consistency in the distance between and angles of the transects, and the potential interaction between Corridors A and B (transects A5 and A6). Therefore, the Panel recommends that the Proponent should provide a clearly articulated, transparent and defensible

The EHG Advice also referenced OCSE’s recommendation for a **minimum average Koala corridor width of 390 to 425m** with buffers of “at least 30m wide from the corridor to the exclusion fence...and an asset protection zone outside the exclusion fencing, within the development footprint.” It reprinted the diagram in the OCSE Response to Questions about Advice to illustrate the requirements. (see below).

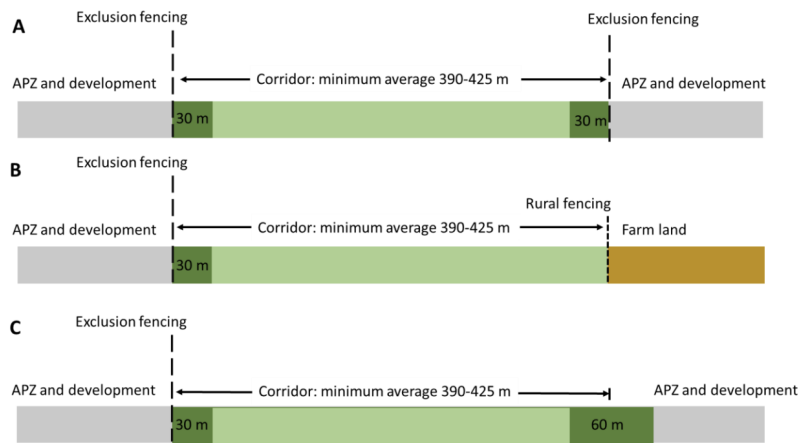


Figure 8: Recommendations for corridors. A) Development either side of the corridor, B) Development on one side and farmland on the other, C) Development on both sides, but with one side unable to be fenced.

Concern 3

Both the Mount Gilead Stage 2 Biodiversity Certification Assessment Report and Biodiversity Strategy (MGS2 BCAR&BS) and the Campbelltown Council’s Report on the Response to Public Submissions fail to refer to the EHG Advice, and neither explains how the Koala protections comply with the OCSE recommendations and the Campbelltown Council’s Koala Plan of Management (CCKPoM).

With respect to the OCSE and final [TAP Advice](#), the MGS2 BCAR&BS only states that its Koala corridors have been designed *in response to OCSE recommendations* and are consistent with indicative identified Koala habitat corridors in the Greater Macarthur update. No assurances are given that the Koala habitat corridors have been updated to comply with the measurements and design guidelines in the OCSE Response to Questions about Advice or with the CCKPoM:

method for calculating the corridor widths and the orientation of the transects. The Panel also notes the clarification sought in Question 4 regarding average corridor width and buffer to the corridor, this should be considered in the calculations.

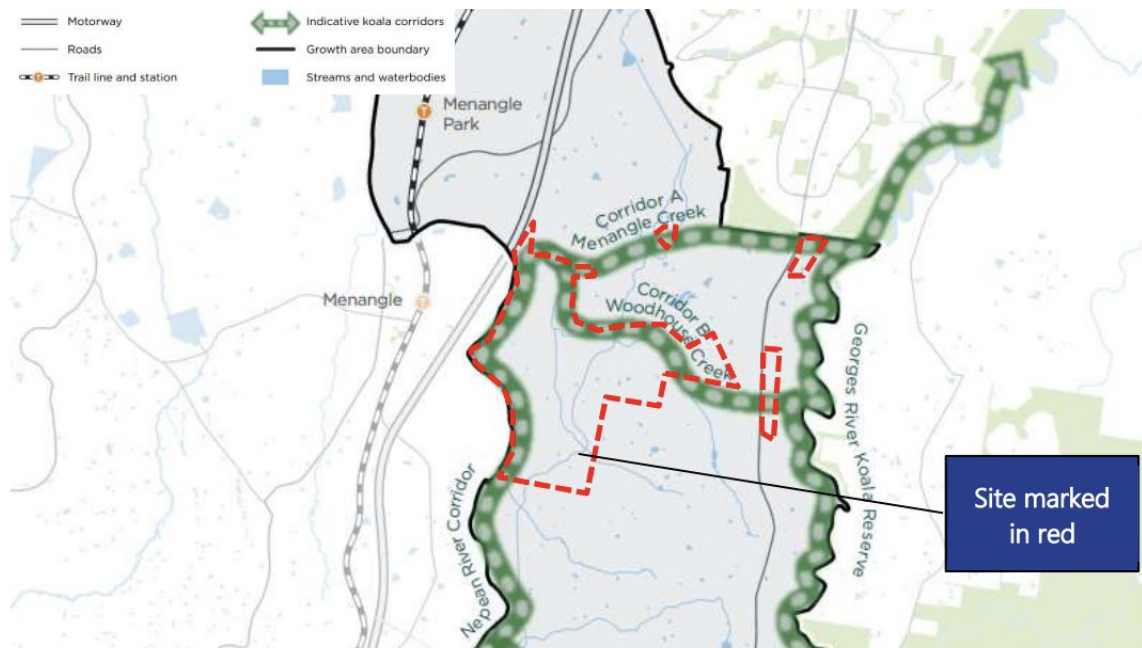
*The updated Master Concept Plan (Figure 4) **has been designed in response to [the OCSE] recommendations** and the planning principles for the Mt Gilead land holdings and have identified Woodhouse Creek as the primary Koala movement corridor within the BCAA between the DPIE Primary Koala corridor to the east of Appin Road, through the Beulah Biobank site, along Woodhouse Creek, to the Menangle Creek and Nepean River corridor and a second corridor is also provided along Menangle Creek (although it is noted that significant parts of this corridor are already impacted by existing development and constraints (bushfires) outside of the Mt Gilead proposal (Gilead Retirement Village) or are landholdings that Lendlease does not have control over (Mt Gilead Homestead and lands to north of Menangle Creek that are subject to the Cumberland Plain Conservation Plan) (Figure 27) and Appendix L. Further, the Master Plan is consistent with the identified koala corridors in the Greater Macarthur update (DPE 2021) prepared by the DPE's Technical Assurance Panel (Appendix M).*

The Campbelltown Council Officer's Report fails to explain how the width and design of the Koala habitat corridors align with its own approved Koala Plan of Management (CCKPoM) and with the subsequent advice it received from its author Dr Steve Phillips. The lack of reference to the CCKPoM is surprising for the following reasons:

1. Lendlease was aware that the CCKPoM had been approved by the state government and was applicable to the development of MGS2 BCAR&BS. The [Gilead Planning Proposal](#) for MGS2 (30 September 2022), prepared by GLN Planning on behalf of Lendlease, refers to "the [August 2020] approval of Council's Comprehensive Koala Plan of Management", and notes "how this document and the OCSE First Koala Report informed the community update to Greater Macarthur 2040, which was released in December 2021."²¹

The Greater Macarthur Update 2040 identified and sanctioned the three key Koala habitat corridors that run through MGS2: north/south along the eastern side of Appin Road and along the western bank of the Nepean River, Corridor A running along Menangle Creek at the northern end of the Site and Corridor B continuing from Beulah along Woodhouse Creek.

²¹ The CCKPoM was first submitted to the DPE for approval in 2016 and finally approved in August 2020. (See [Campbelltown Council media release 21 August 2020](#)).



Source: DPE, 2021

Figure 2. Update to biodiversity corridors in Greater Macarthur 2040

2. Campbelltown Council requested updated advice about the width and design of the Koala habitat corridors on MGS2 from Dr Phillips in order to respond to two reports submitted to Council by Eco Logical, on behalf of Lendlease, that challenged the OCSE recommendations for both the number and width of the Koala habitat corridors on MGS2.²²

Dr Phillips' advice was [tabled](#) at the Ordinary Meeting of Council on 13 October 2020. His recommendations not only informed the subsequent OCSE report, Response to Questions about Advice, but were also used by a Campbelltown Council Local Planning Panel (LPP) as justification for imposing a condition on a Figtree Hill (MGS1) DA for a minimum 250m width on Corridor A: Menangle Creek. Previously, in some places, this corridor was only 80 metres wide.²³

²² Eco Logical, *Mt Gilead Corridor Review and Koala Carrying Capacity and Corridor Review* (March 2020).

²³ See Condition 22A for DA - Tree removal, dam dewatering, bulk earthworks and remediation works - [Appin Road, Gilead in the Campbelltown Council LLP minutes, 16 December 2020](#), page 8, where the Panel says:

In response to public submissions concerning the width of the Menangle Creek corridor in proximity to Noorumba Reserve, the Panel considers there is utility in widening this section of corridor for the purpose of supporting its function as a Strategic Linkage Area for Koalas and other fauna. The Panel notes the recommendations of the Chief Scientist and Engineer report, titled Advice on the protection of the Campbelltown Koala Population suggest that efforts to widen the corridor should be made. The nexus for widening this section would be dependent on securing an effective Appin

Concern 4

The reclassification of environment zones to ‘conservation zones’ by the previous state government has led to a situation where Lendlease has too liberally interpreted what is permitted on C2 Environmental Conservation Land in the Mount Gilead Stage 2 Biodiversity Certification Assessment Report and Biodiversity Strategy (BCAR&BS).

The final [TAP Advice](#) of 21 September 2022 lists the following permitted additional uses for C2 - Environmental Conservation land, but explicitly states that these uses are not allowed on land that forms part of a Koala corridor:

The conservation area that is outside a koala corridor is proposed to have the following additional permitted uses:

- a. Building identification signs,*
- b. Business identification signs,*
- c. Eco-tourist facilities,*
- d. Information and education facilities,*
- e. Roads,*
- f. Kiosks,*
- g. Recreation areas, and*
- h. Water supply systems.*

Road crossing which the Panel understands is being separately addressed via proposed amendments to the State Voluntary Planning Agreement (2018/9398) for Mt Gilead. A minimum suitable width, consistent with the advice of Dr Steve Phillips, as reported to Council’s Ordinary Meeting on 13 October 2020 would be 250m, noting the associated limitations for revegetation due to existing land use in proximity to the creek.

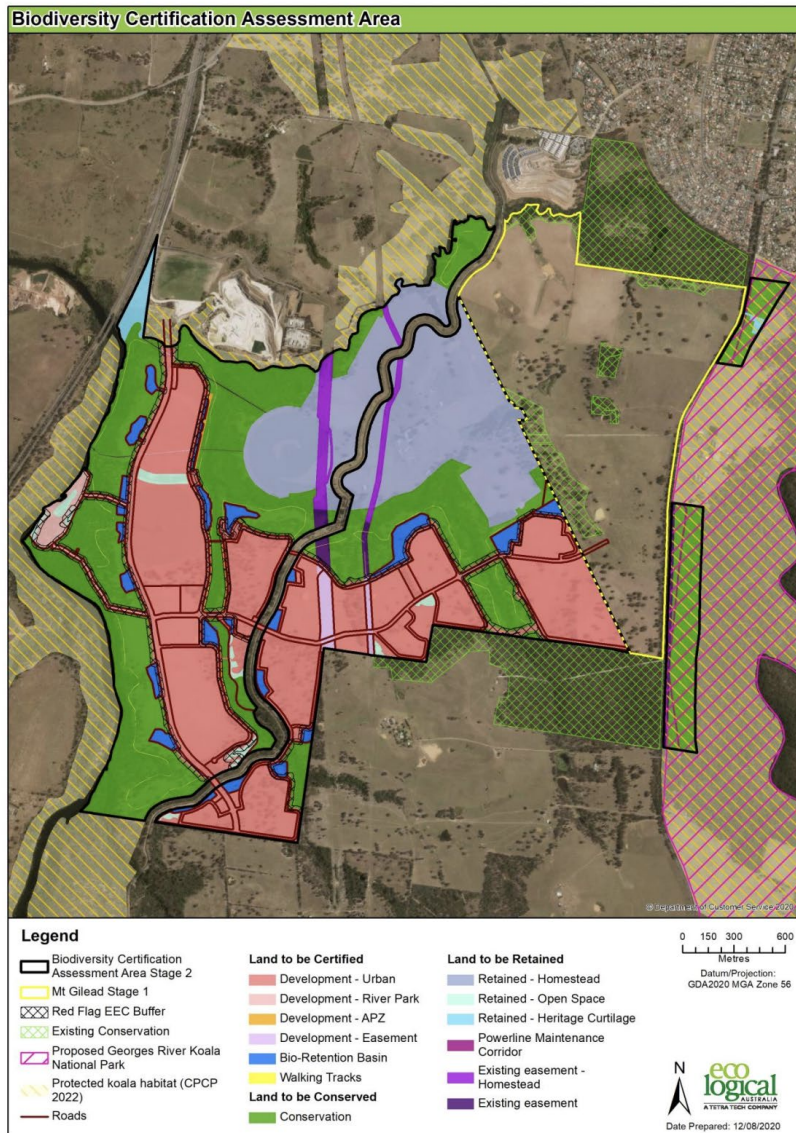


Figure 4: Concept Master Plan

© ECO LOGICAL AUSTRALIA PTY LTD

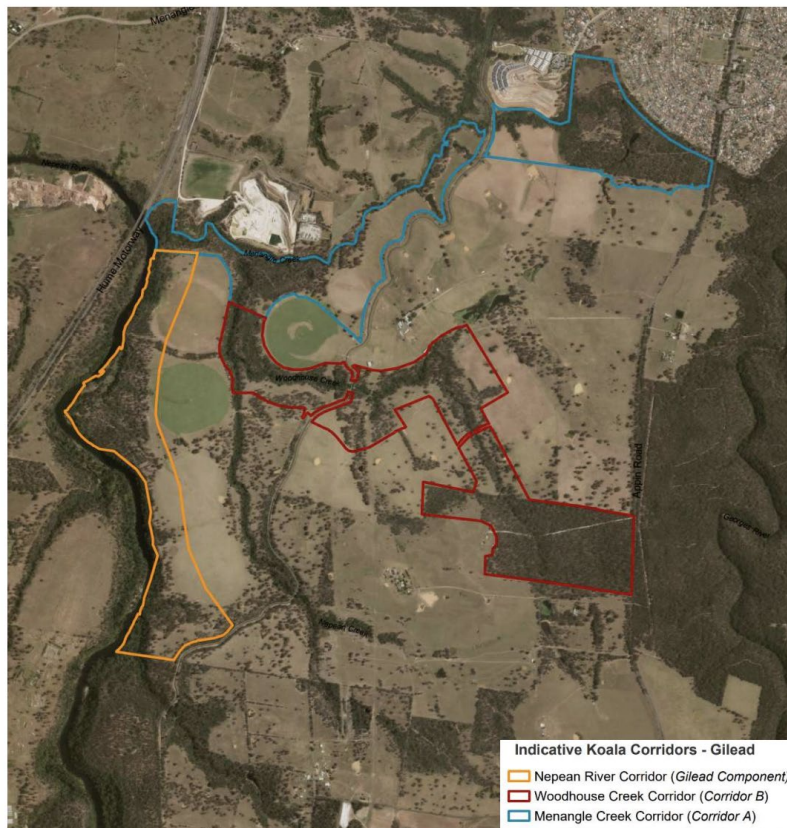
13

Source: [MGS2 BCAR & BS](#), 15 November 2022, page 13

The above “Concept Master Plan” in the MGS2 BCAR&BS shows that the design of the Koala habitat corridors is not in line with the TAP recommendations for permitted uses in Koala habitat corridors. Just one example is the proposed Riverside Reserve (6.38 ha) on the edge of the Nepean River. Although located within the Nepean Koala Corridor, it has been carved out for development as a “River Park” and will include “a one-way access road” that “will link the urban area to this river frontage but will not impact riparian buffers,” be “fully landscaped with picnic/BBQ areas and car parking” and “retain significant areas of tree canopy.”²⁴

²⁴ See [Response to Public Submissions](#), page 113.

This land use is not reflected in TAP's indicative Nepean River corridor, as reproduced below.



Source: DPE, 2022

In the final TAP advice of 21 September 2022, TAP Chair Catherine Van Laeren advised Lendlease's Brendan O'Brien, Head of Strategic Planning, Residential Communities, that changes to the design of the Riverside Reserve must be made "to ensure the proposed uses are consistent with the advice from the Office of the Chief Scientist. While walking trails, seating and wayfinding signs are supported, as the proposed Riverside Reserve is located within the Nepean Koala Corridor it cannot support uses such as access roads, built structures, barbecues, lighting, dog walking, playgrounds, etc."

The [EHG Advice](#) was also critical of the Riverside Reserve's placement:

Based on the advice of the OCSE, the proposed Riverside Reserve including the picnic areas and access roads should not be included within the Nepean River Koala corridor. Proposed clearing of koala habitat to facilitate the reserve and its access roads is not supported by EHG. It should not be certified as it is also inconsistent with the approach to conservation of Koala corridors in the CPCP

and the Appin Part Precinct.²⁵

The Campbelltown Council Officer's Report makes no mention of concerns around the placement of the Riverside Reserve and, as far as SSK is aware, no significant changes have been made to its design.

Concern 5

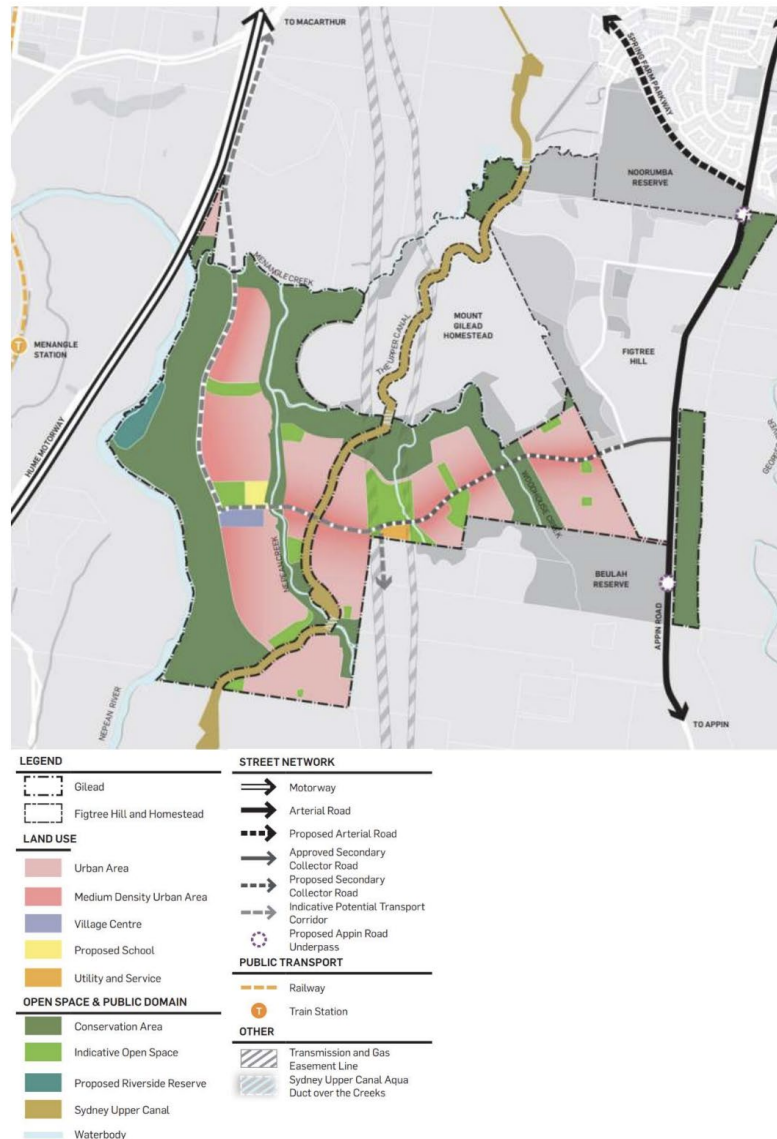
The Mount Gilead Stage 2 Biodiversity Certification Assessment Report and Biodiversity Strategy (MGS2 BCAR&BS) and the Gilead Planning Proposal for Mount Gilead Stage 2 were not exhibited concurrently. This has led to both a lack of clarity and a lack of scrutiny about what is actually being proposed and how it will impact on both the state heritage-listed items and the Koala habitat corridors.

In response to the public exhibition of the [Gilead Planning Proposal](#) (30 September 2022), which was prepared by GLN Planning on behalf of Lendlease, Water NSW made a public submission that was extremely critical of the conservation measures put in place to protect the state heritage-listed Upper Canal. It criticised, for example, the placement of medium density development in the vicinity of the Upper Canal and said that more open space at the interfaces of the Canal corridors were need to protect the water supply from the 'edge effects' of development:

For the large southern lot where most of the development is to occur, the Upper Canal is proposed to be adjoined by predominantly urban areas, including medium density urban development in some locations. We do not agree with medium density housing and related development occurring directly adjacent to the Upper Canal. As the medium density areas are given shown in a variable shading, it appears that medium density housing may directly front the Upper Canal Corridor. We request that the Structure Plan be adjusted so that light pink low density housing is depicted in areas adjacent to the Upper the Canal. Also, any proposed urban development will need to incorporate open space or road reserves, associated with perimeter roads, at the interface with the Canal Corridor, as per the WaterNSW Guideline.²⁶

²⁵ [EHG Advice](#). Letter from Louisa Clark, Director, Greater Sydney Biodiversity and Conservation, EHG, to Adrian Hohenzollern, Director, DPE Metro West, 19 December 2022, page 8.

²⁶ Water NSW Public Submission on the Planning Proposal for Gilead Stage 2 (15 December 2022), page 2.



Source: Urbis, 2022

Figure 7. Lendlease draft Structure Plan for the Site

Steps to protect the Upper Canal from urban development were barely mentioned in the MGS2 BCAR&BS, and no diagrams were included in the document to show the proposed types of density near the Canal or the Koala habitat corridors.²⁷

Water NSW's concerns also weren't addressed in the Campbelltown Council Officer's Report even though a previous [Officer's Report on the Council's draft Local Housing Strategy \(29 September 2020\)](#) noted that "Water NSW indicates that it is important that new housing development be set back from the Corridor and buffered by public open space, perimeter roads or road reserve." In the same correspondence, Water NSW also

²⁷ The Upper Canal was mentioned once in the MGS2 BCAR&BS in relation to the critically endangered Pomaderris brunnea (Rufous Pomaderris), where it noted that "five plants were recorded within the Upper Canal corridor which bisects the Biodiversity Certification Assessment Area (BCAA)." For the purpose of the MGS2 BCAR&BS, the Upper Canal was considered outside of the BCAA area. (see page 52).

advised Campbelltown Council that Lendlease may need to revise downwards the lot yield projections for MGS2 in light of the 28 August 2020 listing of the 150 ha Mount Gilead Estate on the State Heritage Register.²⁸

The state heritage-listed Mt Gilead Estate is centred between MGS1 and MGS2. At the [time of its listing](#), a Heritage NSW spokesperson said that while "the main buildings and landscape area subject to the listing was outside Lendlease's proposed development footprint...any development in the vicinity would require consultation with the Heritage Council of NSW."

The Gilead Planning Proposal provides a table of the heritage items but only says that:

*The Planning Proposal and draft Structure Plan maintain existing interfaces with each of these items or provide for similar outcomes that are consistent with the adjoining Figtree Hill development or similar greenfield release areas that have an interface with the Upper Canal. As such, it is considered unlikely that the development of the Site will impact on the significance of the items.*²⁹

According to the [Review of the Technical Assurance Panel Pilot Program for the Greater Macarthur Growth Area \(September 2022\)](#), Water NSW and the Heritage Council were not represented on the assurance panel; a surprising omission given that three state heritage-listed sites either border or are located within MGS2. The Review does say that Heritage NSW was consulted but its advice appears not to have been made public.

Water NSW's sensitivity about what is being proposed in the Indicative Structure Plan for MGS2 is particularly understandable given that the Upper Canal is [still the only way of transferring water](#) to Sydney from the four Upper Nepean Dams (Cataract, Cordeaux, Avon and Nepean), supplying on average 20% of Sydney's water supply. Its submission explains that "the Proposal places significant development pressure on the Canal and Corridor," and highlights that the potential for adverse impacts is exacerbated by the unique characteristics of the Upper Canal in the Planning Proposal Area:

*Most of the Upper Canal occurs as open waters in the Planning Proposal Area, making water quality protection a critical issue. It is essential to ensure that the Upper Canal and associated Corridor are protected from the impacts of the development and the security of water supply is not compromised by the development.*³⁰

²⁸ [Campbelltown Council, Extraordinary Agenda, 29 September 2020](#), page 16.

²⁹ GLN Planning, [Gilead Planning Proposal](#) for MGS2 (30 September 2022), page 70.

³⁰ Water NSW Public Submission on the Planning Proposal for Gilead Stage 2 (15 December 2022), page 1.

The EGH Advice expressed concerns about the failure of the MGS2 BCAR&BS to address connectivity issues for the koalas where the Koala habitat corridors interface with the Upper Canal Corridor. It also questioned why the proposed basins for managing stormwater run-off and discharge are located within the Koala habitat corridors, noting that their placement is contrary to the OCSE advice:

In considering the OCSE advice... EHG is of the view that the basins would be considered as 'development' and as such should be located on the development side of the exclusion fence within the development footprint... It appears that the basins will also result in the removal of habitat within Koala corridors, which is not supported by EHG, and there will be ongoing impacts associated with maintenance of the basins... Furthermore, the CPCP does not include certified areas for basins within Koala corridors in the Appin Part Precinct. Therefore, EHG believes the proposal to certify basins within the Koala corridors is inconsistent with the Koala corridor conservation approach in the CPCP for the Appin Part Precinct.³¹

Water NSW's submission to the MGS2 Gilead Planning Proposal also questioned whether the stormwater retention basins have been adequately designed to cope with post-development stormwater overflows:

We believe that there is insufficient space allocated in the Draft Structure Plan for stormwater management measures such as detention basins. The planning controls of the proposed Precinct Plan (Appendix S) do not specifically link open space to stormwater management nor specifically require the Structure Plan to allocate appropriate land (including open space) for stormwater management purposes. The Precinct Plan's reliance on the DCP alone to provide stormwater and water quality controls is not sufficient to ensure that stormwater control measures will be located in appropriate areas to protect the Upper Canal from adverse stormwater impacts. The Draft Structure Plan does not show the locations of the stormwater detention basins and related measures as presented in the Stormwater Management Strategy in Appendix P.³²

Water NSW also claims that it has so far not been consulted about the placement of a new potential transport corridor - a road - crossing the Upper Canal halfway along its length on the MGS2 property. Its submission says that "the elevations involved to provide the

³¹ [EHG Advice](#), page 9.

³² Water NSW Public Submission on the *Planning Proposal for Gilead Stage 2*, 15 December 2022, page 2.

required clearance over the Upper Canal Corridor are likely to affect the proposed local road and urban design...the proposed location of medium density urban areas, and expected lot yield in this vicinity. The [Water NSW Building] Guideline should be consulted and these matters factored into the Draft Structure Plan before it is approved."³³

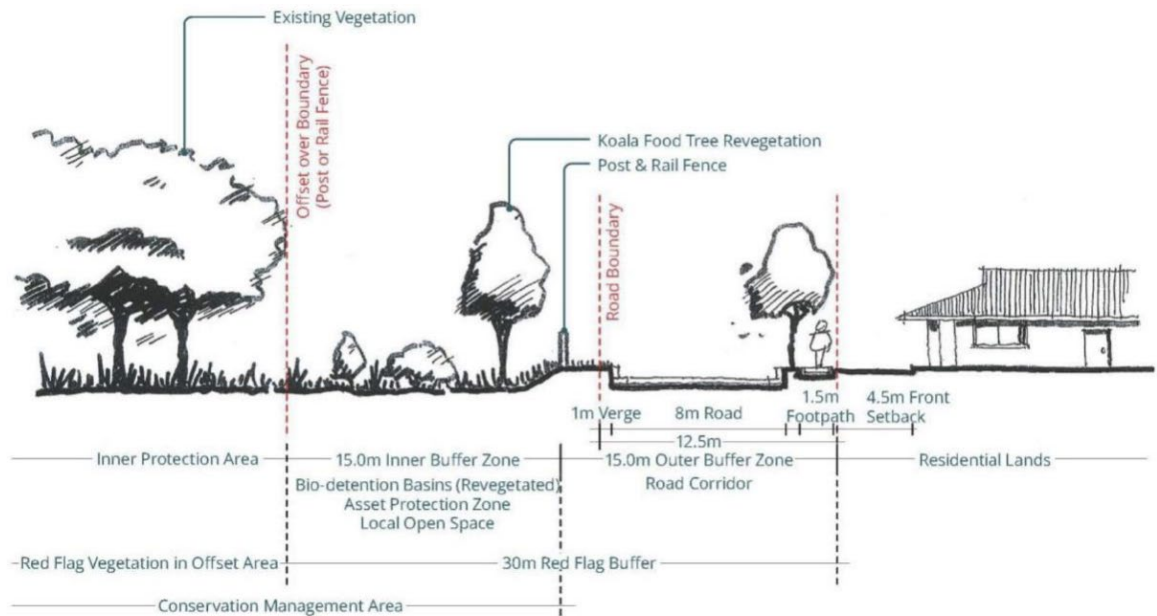


Figure 4: Example of buffer zone at proposed Mount Gilead Stage 2 development (Source: Eco Logical Australia, 2020)

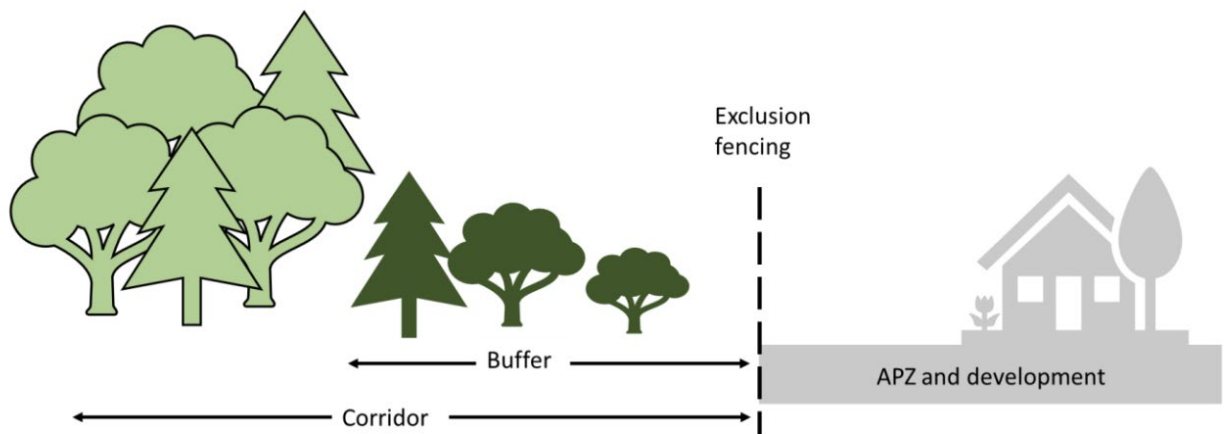


Figure 7: The separation of the vegetated buffer (which can include koala feed and shelter trees, with a bias towards the area adjacent to the corridor) and APZ

Above: The design for the Koala corridors that Lendlease submitted to the OSCE for advice. Below is an example of a best practice design for the Koala corridors that was printed in the OCSE Response to Questions about Advice.

³³ Ibid.

Concern 6

The failure of the development approval processes to confirm that the number of dwellings on MGS1 and MGS2 are capped at 5,000 (1,700 dwellings for MGS1 and 3,300 dwellings for MGS2) in order to ensure that the 'edge effects' of urban density on the Koala habitat corridors are minimised.

The OCSE Koala Independent Expert Panel was very concerned about the 'edge effects' of urban density so close to Koala habitat, observing in its First Koala Report that:

urban development in proximity to fauna habitat has increased the potential 'edge effects' that species such as koalas experience... Edge effects can include both direct (i.e. vehicle strike and dog attacks) and indirect (i.e. light and noise pollution, urban storm runoff) impacts on fauna and flora, and can result in altered behaviour (for example, changes in home ranges or in how species disperse throughout a landscape) that can have serious repercussions.³⁴

The [Gilead Planning Proposal](#) does not confirm that the potential new development on MGS2 will be limited to 3,300 new dwellings only. Rather, it refers to 3,300 residential lots and acknowledges that density and average lot size outcomes are expected to rise slightly once work commences with Campbelltown Council on a detailed masterplan.

Clarifying the exact number of new dwellings proposed for MGS2 is important because, according to the [TAP Advice](#), the required amount of open space for the site is based on the assumption that MGS2 will accommodate a future population of 10,313 people - a figure derived by multiplying the number of people expected to live in 3,300 new dwellings:

Using the benchmark of 2.83ha per 1000 people, Gilead Stage 2 requires a total of 29.1ha of open space. This is calculated on the assumption of a future population of 10,313 people noted in the supporting studies.

Campbelltown City Council's Sport and Recreation Strategy (2016) provides the benchmark of 1.37ha per 1000 people for active open space. Based on the future population of 10,313 people for Stage 2, this equates to 14.1ha.³⁵

³⁴ [Advice on the protection of the Campbelltown Koala population Koala Independent Expert Panel](#), 30 April 2020 (OCSE First Koala Report), page 49.

³⁵ [Advice on the protection of the Campbelltown Koala population Koala Independent Expert Panel](#), 30 April 2020 (OCSE First Koala Report), page 49.

When the planning proposal for Figtree Hill Estate (MGS1) was revised in 2021 to include new business and medium density zones, TfNSW raised concerns that "the proposed amendments were likely to allow a substantial increase in development yield beyond that originally proposed under the 2017 re-zoning (1,700 lots)."³⁶ It recommended an assessment of traffic and transport impacts on the surrounding road network and said that a specific clause nominating a residential dwelling cap of 1,700 should be included in the Campbelltown Council LEP.³⁷

In response, Campbelltown Council said that "the original rezoning in 2017 was based on 1,700 dwellings and forms part of the agreed Local and State VPA (2018/9398), and the exhibited planning proposal does not alter this yield and only seeks to introduce in part, opportunity for dwelling diversity." Nevertheless, it did acknowledge that a "new clause for a dwelling cap is not considered appropriate as it is unable to be enforced in preventing developer actions that are otherwise allowed under higher-order State Environment Planning Policies (SEPPs) as seen by the recent removal of dwelling caps for Macarthur Gardens, Claymore and Airds."³⁸

In order to support its reasoning for supplying only the required minimum amount of open space on MGS2, the Gilead Planning Proposal refers to 19ha of "higher order open space" on MGS1 as being "surplus" to requirements:

The draft Structure Plan identifies over 30ha of open space with key open space areas sited to recognise iconic locations and amenity or their function. It is also supported by a significant surplus of higher order open space facilities (approximately 19ha) to be delivered as part of Lendlease's Figtree Hill to the immediate east of the Site.

But this statement fails to mention that in order to gain approval for a revised MGS1 planning proposal, which included a town centre and substantial new medium-density development, Lendlease agreed to increase public open space on MGS1 by 19ha.³⁹ Further, the original Biodiversity Certification for MGS1 that was approved by both the state and federal governments was informed by an indicative structure plan for low rise

³⁶ Transport for NSW advice as referred to in DPE NSW, Planning Plan finalisation report – PP-2020-3093 Campbelltown LEP 2015 – Mount Gilead, Stage 1 Urban Release Area (April 2022), page 2.

³⁷ Ibid.

³⁸ Ibid, page 3.

³⁹ [Press reports](#) at the time indicated that the NSW Planning director, Catherine Van Laeren, approved the Gateway Determination for the Lendlease's revised planning proposal with a series of conditions including a request that Campbelltown Council investigate biodiversity issues and the securing of land for additional open space.

residential development only, in order to "ensure the preservation of regional views to a rural landscape".⁴⁰

Whilst the [Gilead Stage 2 Gateway Determination Report](#) (November 2022) states that the rezoning is expected to deliver 3,300 new homes, the diversity of housing permitted on MGS2 includes a significant amount of medium density development zoning across the 3,300 residential lots that could, if permitted, lead to a much higher number of new dwellings over time:

*The rezoning is expected to deliver 3,300 new homes across low density housing types (dwelling houses, dual occupancy, attached dwelling) and medium density housing types (dwelling houses, dual occupancy, attached dwelling, multi dwelling housing, manor home, manor house, mixed use development, residential flat building, shop top housing).*⁴¹

Similarly, despite [TAP Advice](#)'s surprising acknowledgement that the Koala Corridors will provide "a substantial amount of accessible conservation land", it still questioned whether enough open space was being provided exclusive of the Koala habitat corridors:

Gilead Stage 2's portion of Koala Corridor A along Menangle Creek, Koala Corridor B along Woodhouse Creek, and the Nepean River Koala Corridor will provide a substantial amount of accessible conservation land. This will be a unique asset and opportunity for both the survival of Sydney's koalas and the amenity of future residents.

*However, some passive open space is still required for playgrounds, BBQ and toilet facilities and active recreation opportunities (such as hardcourts and sports fields), etc which the Koala Corridors cannot accommodate. **Considering the overall planned and proposed open space across Stages 1 and 2, noting there is no active open space provided in Figtree Hill, the final structure plan for Stage 2 must include at least: a. 20.9ha of active open space and b. 8.2ha of passive open space.***⁴²

Also, important to note is the illustration of a best practice design for Koala habitat corridors that was shared with both the DPE and Lendlease in the OCSE Response to

⁴⁰ The [minutes](#) of the 16 December 2020 meeting of the Campbelltown City Council Local Planning Panel (LPP) record that the Panel approved a Lendlease DA for earthworks on the MGS1 site because it "is consistent with the original indicative structure plan that seeks to permit low rise residential development that ensures the preservation of regional views to a rural landscape."

⁴¹ Gateway determination report – PP-2022-3978 Gilead Stage 2 (November 22), page 16.

⁴² [TAP Advice](#). Letter from Catherine Van Laeren Chair, Technical Assurance Panel, to Brendan O'Brien Head of Strategic Planning, Residential Communities Lendlease, 21 September 2022, page 4.

Questions about Advice (see page 25 of this document). This design does not allow for opportunities for passive recreation within the Koala habitat corridors. On the contrary, it recommends exclusion fencing to be installed on the external perimeters of the 30m wide buffers on either side of the Koala habitat corridors.

Concern 7

Transport for NSW's (TfNSW) decision to allow Lendlease to commission the Addendum Review of the Environmental Factors (Addendum REF) for the Appin Road upgrade has led to suboptimal solutions for the two wildlife underpasses and a perceived conflict of interest.

SSK made a public submission on the [Addendum Report on the Environmental Factors for the Appin Road upgrade from Mount Gilead to Ambervale \(November 2022\)](#) (Addendum REF) that was prepared by EMM Consulting Pty Ltd for Lendlease on behalf of TfNSW to facilitate the inclusion of two wildlife underpasses and fauna fencing on the eastern side of Appin Road.

In summary, SSK's submission raised numerous examples of perceived conflicts of interest and inadequate analysis of the environmental impacts, including:

- **The fact that one of the main beneficiaries of the Appin Road upgrade, Lendlease, was allowed to commission the Addendum REF on behalf of TfNSW.** Enquiries about the Addendum REF were also directed to a Lendlease email address.
- **The Addendum REF's dubious claim that "The impacts of the proposal have now been assessed as 'not significant' under both State and Commonwealth assessment criteria due to its limited impacts and the size and wide distribution of the local koala population."** This claim was in direct contradiction to the OCSE First Koala Report, which clearly emphasised how essential the existence of *local* native bushland and rural farmland has been for ensuring that the Campbelltown Koala population can expand its numbers and reach:

*The Macarthur region is host to a historically continuous population of koalas, known as the Campbelltown population. The population of between 250 and 500 individuals is surviving in a landscape that is predominantly native bushland that is connected to rural farmland or periurban environment in the vicinity of the Greater Macarthur area.*⁴³

⁴³ [OCSE First Koala Report](#), page iv.

The claim is also not in line with Addendum REF's acknowledgment of the high level of Koala roadkill on the section of Appin Road to be upgraded:

The Department of Planning and Environment's (DPE's) flora and fauna database, Bionet, holds records for 31 koala strikes on the section of Appin Road between Rosemeadow and Appin Township between 2010 and 2021 (Data downloaded August 2021). This figure would underestimate actual koala vehicle strikes as not all incidents would be reported. The modification of the Project REF is being proposed following confirmation of the State Government's position on fauna corridors as part of the NSW Chief Scientist's advice (Advice on the protection of the Campbelltown Koala population, Koala Independent Expert Panel, 20 April 2020) and later update to Greater Macarthur 2040.⁴⁴

- **The fact that the Addendum REF includes a report by Eco Logical, *Biodiversity Assessment for Appin Road Upgrade, Review of Environmental Factors*, which says that the "Koala is not an endangered ecological community." As a consequence, this report argued that the requirement to assess adverse effects on the risk of extinction to the local Koala population was not applicable.⁴⁵**

Obviously, the author of this report was either unaware or failed to mention that on 12 February 2022 koalas in NSW were [formally listed as endangered](#) under the federal government's Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), and subsequently [listed on 20 May 2022 as an endangered species](#) under the NSW Biodiversity Conservation Act 2016 (BC Act).

- **The fact that the Addendum REF includes designs for underpasses at Glen Lorne and Browns Bush that are very different from the best practice culvert-style designs that DPE and Lendlease showed the OCSE Koala Expert Panel. As highlighted in the OCSE Response to Questions about Advice, the Koala Expert Panel considered the box culvert to be a good solution:**

⁴⁴ Transport for NSW, Appin Road Upgrade, [Mount Gilead to Ambarvale, Addendum Review of Environmental Factors](#), prepared by EMM Consulting Pty Limited and Lendlease Communities (Figtree Hill) Pty Limited for Transport for NSW (November 2022), page 22.

⁴⁵ Eco Logical Australia Pty Limited, [Biodiversity Assessment for Appin Road Upgrade, Review of Environmental Factors, Addendum Report on Environmental Factors](#) (16 November 2022), page 46.

*There is good evidence that koalas use [box] culvert structures (e.g. Woolgoolga to Ballina Pacific Highway upgrade), with a documented case of a successful crossing of a 100 m long culvert, noting that important aspects for koala crossings are in their fit-out, including that they are dry and well ventilated structures.*⁴⁶

As far as SSK is aware, the now proposed narrow pipe designs have not been assessed by the OCSE's Koala Independent Expert Panel. But, according to Maria Matthes, a Threatened Species ecologist who advised the TfNSW about appropriate underpasses for the Woolgoolga to Ballina Pacific Highway Upgrade, the new designs are suboptimal and unlikely to be used by the koalas.

The Addendum REF states that “overall, it is considered that the proposed underpasses, in association with exclusion fencing, have a strong likelihood of success based on evidence of koalas using similar structures on other road projects, such as the Oxley Highway, Wardell Road and Bonville Bypass projects.” But the underpasses referenced above are either culvert-style structures or in the case of the [Bonville Bypass](#) a combination of a 60-metre-wide fauna overpass, eight underpasses, some utilising existing structures like service roads, drains and creek bridges, or artificially lit culverts.



[Wardell Road Underpass](#), Pacific Highway, Wardell

⁴⁶ [OCSE Response to Questions about Advice](#), page 4.

- The likelihood is that the proposed design for the Glen Lorne underpass was only modified after a Campbelltown Council Local Planning Panel (LPP) imposed Condition 2(a) on Lendlease's DA2687/2018/DA-SW at its meeting on 24 August 2022. It set aside 10 lots from a 138 residential lot subdivision to allow room for the proposed Glen Lorne underpass adjacent to the Noorumba Reserve on the Figtree Hill Estate (MGS1).

The [Campbelltown Council LPP's Considerations and Reasons for the Decision](#) noted that:

Further review of the TfNSW REF is likely to accommodate an amended scope of works to the State VPA to include fauna underpasses adjacent to Noorumba Reserve and Beulah. In this regard, the Panel is conscious that the proposed development in the north east corner of the site may compromise the most suitable outcome. Therefore, it is considered prudent to exclude proposed lots 1397 – 1398 and 1372 - 1379 to form a residue lot, until such time as detailed design of the Noorumba underpass is formalised within an appropriate planning approval.⁴⁷

Above: The excluded lots from the residential subdivision to make room for the Noorumba Glen Lorne underpass are marked 1372 and PT1389. Source: [Stage 1C Subdivision plans, Lot 1, Appin Road, Gilead](#)

The Addendum REF now shows a scaled-back underpass for Glen Lorne that does not encroach on the 10 blocks excluded from residential development by the LLP.

- The Addendum REF argues that the width of the two Koala underpasses has been reduced in size to stop encroachment on the Noorumba/Beulah Biobank sites, but says nothing about how this situation could be avoided if the underpasses were constructed on more of the land owned by Lendlease:

Options are limited in relation to the installation of the underpass pipes. An initial assessment by designers shows that bored pipes (also known as pipejacking) typically require 2.5 times the pipe diameter to what is being proposed. If the pipes were sunk lower to enable pipe jacking, then the earthworks would encroach into the

⁴⁷ [Minutes of the Campbelltown Council LLP](#), (24 August 2022), page 4.

*Noorumba/Beulah Biobank sites and would trigger the need for retaining walls to stop the encroachments. For the larger pipe, a mini tunnel boring machine (TBM) would be required which would result in a larger construction footprint to enable use of the TBM.*⁴⁸

- **The fact that the Addendum REF explains that only a temporary koala/fauna underpass (two x 1.2m diameter pipes) will initially be built at Browns Bush Beulah and offers no information about the timing of a more appropriate replacement including its likely design.**

Lendlease’s explanation in the Addendum REF about why only a temporary underpass will be built at Browns Bush is both inexplicable and unacceptable given the urgency of securing appropriate koala habitat corridors and putting well-designed Koala underpasses in place before intensive development is allowed to proceed on both MGS1 and MGS2:

*In July 2022 Lendlease submitted an irrevocable letter of offer for the inclusion of additional infrastructure to be delivered under the Mount Gilead Planning Agreement to the Planning Minister. The additional infrastructure included the provision of a permanent underpass on Appin Road adjacent to the Beulah biobank within Corridor B (as identified in the NSW Government Chief Scientist’s advice). The timing and extent of this proposal however has not yet been determined and separate approval would be required. The permanent crossing does not form part of this Addendum REF works. In the interim, approval of the amendments sought by this Addendum REF is required to support the relevant approved Appin Road upgrade works under the Project REF. These works are urgently required to improve safety on the relevant section of Appin Road. To meet the requirements of the NSW Chief Scientist, as well as facilitate the road upgrade, it is proposed to construct a temporary underpass at the southern extent of Mount Gilead Stage 2 land (Browns Bush underpass).*⁴⁹

Importantly, the OCSE was originally shown a very different concept drawing for the Browns Bush Beulah underpass, which was found to be “a well-conceived structure and is likely to be used by koalas.”

⁴⁸ Transport for [NSW, Appin Road Upgrade, Mount Gilead to Ambarvale, Addendum Review of Environmental Factors](#), prepared by EMM Consulting Pty Limited and Lendlease Communities (Figtree Hill) Pty Limited for Transport for NSW (November 2022), page 31.

⁴⁹ [Addendum REF](#), page 6.

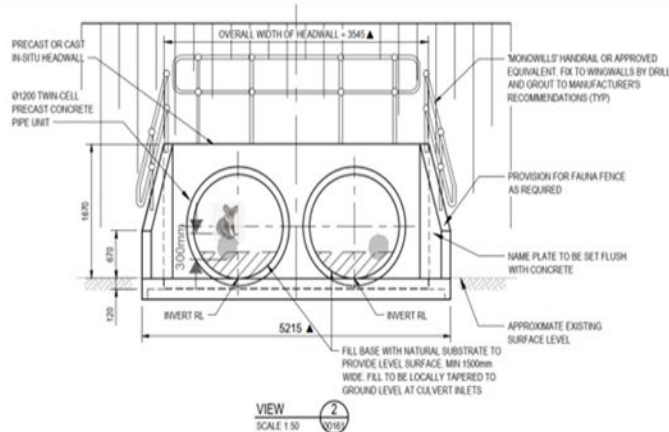


Figure 7 Indicative fauna furniture through Browns Bush underpass

Above: The image on the right of the proposed temporary underpass Browns Beulah is very different to the one reproduced in OCSE First Koala Report.

- The likelihood that the Glen Lorne Noorumba underpass was reduced in size so Lendlease could lodge its recent \$4.55 modification request to remove Condition 2(a) from DA2687/2018/DA-SW. The [GLN Statement of Support](#) for the S.4.55 modification request falsely claims that:

*the Chief Scientist & Engineer Report (CSER) imposed no requirement for a fauna crossing at corridor (A) to be located on the Applicant's land, on the contrary, the CSER acknowledges that the land-use planning for the Figtree Hill site was settled prior to the publication of that advice in April 2020. The residential zone on which the development application relies was published in September 2017.*⁵⁰

To the contrary, the OCSE Response to Questions about Advice stressed the importance of not letting land tenure issues jeopardise the securing of appropriately sized corridors on MGS2 and neighbouring landholdings, noting that “there are recent sightings and evidence of koalas in the Noorumba Reserve and across Appin Road in the Bionet database (2019).” Its advice emphasised “the importance of a holistic planning approach. By their very nature, the habitat corridors within the two study areas cross multiple tenures and landscapes, connect internally and with each other. Koalas, in using these corridors, do not recognise lines on maps” “the tenure of the land should not preclude it from being included in the corridor

⁵⁰ Section 4.55 Application to Modify DA 2687/2018/DA-SW from Matt Cooper, Director, GLN Planning Pty Ltd, to Jim Baldwin, Campbelltown Council, 17 October 2022, page 2.

or buffer calculations.”⁵¹

Understandably, SSK has reluctantly formed the view that expediency, expense and loss of land for residential subdivisions are the real reasons why Lendlease doesn't want to build underpasses based on best practice design.

Conclusion

The BC Act 2016 gives the Minister for the Environment the power to declare [Areas of Outstanding Bioversity Value \(AOBV\)](#). If the previous state government had called for nominations immediately after the BC Act came into effect, instead of waiting until [September 2021](#), SSK is confident the whole of Mount Gilead, as well as extensive rural holdings to the south of the site, would have been nominated. The EGH Advice notes, for example, that Koala habitat on the property is only one of its many outstanding biodiversity values:

During the TAP process, EHG consistently advised that the site contains high biodiversity values in addition to Koala habitat that must be considered as part of the conservation outcomes. This includes:

- *Cumberland Plain Woodland, which is listed as critically endangered ecological community (CECC).*
- *Shales Sandstone Transition Forest with is listed as EEC*
- *River-Flat Eucalypt Forest which is listed as CEEC*
- *River-Flat Eucalypt Forest which is a listed EEC*
- *Threatened species habitat including habitat for Squirrel Glider, Cumberland Plain Land Snail, Southern Myotis and Pomaderris brunnea.*⁵²

Similarly, one of the previous government's first reports on the environmental risks of proceeding with intensive urban development in the Greater Macarthur area, the aforementioned [Conserving Koalas in the Wollondilly and Campbelltown Local Government Areas](#), highlighted the importance of keeping existing Koala habitat intact (estimated to be in the vicinity of 8,292ha for core habitat only) and available for koalas to disperse:

The direct loss of core and supporting koala habitat and any subsequent habitat fragmentation would have the most significant impact on koalas in the area. It has been demonstrated that as areas of habitat for koalas are reduced, koala population

⁵¹ [OCSE Response to Questions about Advice](#), page 8.

⁵² EHG Advice, page 12.

*sizes are directly impacted, and the likelihood of local extinction increases. The survival of metapopulations relies on the ability of animals to recolonise habitat patches where a subpopulation has become extinct. For koala populations to thrive and maintain genetic biodiversity, habitat must remain intact and available for koalas to disperse.*⁵³

You will recall that the Chief Scientist was asked by the former government to convene the Koala Independent Expert Panel because of growing public alarm about the future for koalas in the wild in NSW. Dire warnings about the prospects for their survival were subsequently confirmed by the [Legislative Council's Inquiry into Koala populations and habitat in NSW](#), which found that predictions of the Koala being on track to become functionally extinct in NSW by 2050 were far too optimistic because "the scale of loss as a result of the fires to many significant local populations" hadn't been factored into the modelling.

Whilst the Campbelltown Koalas were gratefully spared from the carnage of the 2019/20 Black Summer Bushfires, public outrage about Lendlease's decision to commence construction at Mount Gilead before adequate Koala protections were put in place, led to the Legislative Council [supporting a motion](#) in November 2021 "to halt any further rezoning and development of the site until the underpasses and koala corridors on the Mount Gilead property, Menangle Creek Noorumba (Stage 1) and Woodhouse Creek (Stage 2), were protected, consistent with the Chief Scientist & Engineer's Advice."⁵⁴

But yet here we are!

Work is still underway on the Figtree Hill Estate, the woefully inadequate MGS2 BCAR&BS has now been forwarded to DPE and onto your office for final approval, and last year the former government rushed approval for the [Cumberland Plain Conservation Plan](#) (CPCP) - a landscape-scale biodiversity certification scheme that puts the onus on the state government, not the developers, to deliver the conservation outcomes in four new urban growth areas from Penrith to Wilton over the next 35 years.

With respect to advice about Koala protections, the Koala Independent Expert Panel of the OCSE did not shy away from expressing disappointment with the DPE's weakening of the criteria for assessing the adequacy of the proposed Koala protection measures in the CPCP. Its second report, [Advice regarding the protection of koala populations associated with the Cumberland Plain Conservation Plan, 14 May 2021](#) (OCSE Second Koala Report),

⁵³ NSW DPIE, [Conserving Koalas in the Wollondilly and Campbelltown Local Government Area](#) (October 2019), page 25.

⁵⁴ [The Battle for Figtree Hill and the Koala corridor](#) by Rose Mary Petrass, The Fifth Estate, 24 February 2022.

highlighted that the OCSE was now only being asked to assess whether the CPCP is considered 'adequate' against the following modest criteria:

- *condition of important koala habitat is improved,*
- *connectivity between koala sub-populations is maintained,*
- *threats to koalas are managed and the koala population in South Western Sydney persists.*⁵⁵

Given that the original “guiding principles for the Panel were to maximise koala population persistence and abundance, koala habitat amount and connectivity, and minimise contact between koalas and the urban environment to reduce hazards and threats”, the weakening of the objectives for its critique of the CPCP forced the OCSE Second Koala Report to comment on the lack of a clear definition of the terms 'adequacy' and 'persist', and to argue that "that it must aim towards a thriving and resilient koala population rather than simply a population ‘hanging-on.’"

Remarkably, the Macarthur koala population is still the largest recovering population in NSW; chlamydia free and expanding north, south and west. Recent genetic testing, for example, has shown that the [Sutherland Shire koalas](#) originally came from Campbelltown; further evidence for why wildlife corridors connecting the Campbelltown koalas with the larger south-west Sydney regional koala population are so important.

⁵⁵ OCSE, [Advice regarding the protection of koala populations associated with the Cumberland Plain Conservation Plan, 14 May 2021](#) (OCSE Second Koala Report), page 6.