

**Submission
No 67**

INQUIRY INTO INTEGRITY OF THE NSW BIODIVERSITY OFFSETS SCHEME

Organisation: Save Sydney's Koalas

Date Received: 31 August 2021



Introduction

Thank you for the opportunity to make a submission to the Upper House Inquiry into the integrity of the Biodiversity Offset Scheme (BOS).

To highlight the significant failings of the BOS to protect biodiversity and koala habitat in NSW, this submission will discuss the problems of prematurely conferring biodiversity certification on the conservation plan for Lendlease's Mt Gilead Stage 1 (MGS1) residential housing development in Campbelltown and the flawed Biodiversity Assessment Method (BAM) that has informed the conservation plans for the Mt Gilead Stage 2 (MGS2) biodiversity certification application.

In summary, this submission will highlight the following major reasons why the NSW's BOS is causing a net loss of biodiversity in NSW:

- The biodiversity certification conferral program seemingly doesn't allow for amendments when significant changes occur in environmental and regulatory circumstances, eg, the gazetting of a stronger Koala State Environmental Planning Policy (Koala SEPP 2021) or the approval of a council's local Koala Plan of Management.
- The BAM for biodiversity certification applications doesn't compel applicants to accommodate the recommendations of independent expert reports on, for example, the protection of koala habitat corridors on their properties.
- The design of the BAM for the calculation of "species credits" is limited in its scope and doesn't calculate, for example, the environmental impact of developing on cleared rural lands even when they are identified as integral to the design and protection of a wildlife habitat corridor.
- Permission to offset biodiversity impacts away from the development site is allowed even when 'like for like' offsets could be accommodated on-site by a reduction in the development footprint.
- The ability to retire species credits by paying cash to "enhance" an existing biobank site or into the Biobank Conservation Trust, a practice that doesn't add to the amount of protected area for the threatened species.
- The BOS doesn't meet the higher environmental standards of the Commonwealth's biodiversity offset scheme. The Environmental Protection Biodiversity

Conservation Act 1999 (EPBC Act), for example, requires that environmental offsets for protected matters must be 'like for like' only.

- The BOS gives developers the option to apply for a 'red flag area' variation to secure permission for the destruction of areas that are not meant to be disturbed because of their high biodiversity conservation value.
- The BOS is not designed to give enough due respect to the precautionary principle, which informs both state and federal environmental legislation. It requires authorities to refuse development that has the potential to cause serious and/or irreversible environmental impacts.
- The BOS requires developers to pay for and commission their own environmental impact statements, a scenario that potentially compromises the independence of the consultant and creates a conflict of interest.

Brief description of Lendlease's Mt Gilead Development

Property developer Lendlease says that it wants its large-scale, multi-stage residential development of the 881.6 ha Mt Gilead property to “improve the natural environment” so that the “nearby” koala population can “thrive and expand in and through the lands at Gilead.” [Gilead Koala Conservation Plan](#), October 2020 (GKCP).

The Mt Gilead greenfield development represents the first stage of [The Greater Macarthur 2040: An Interim Plan for the Greater Macarthur Growth Area](#), which forecasts that around 15,000 new homes will eventually be delivered in the broader Gilead precinct. Designed to allow the private sector to deliver up to 58,000 new dwellings in the region over the next twenty years, the Greater Macarthur Growth strategy is “to be led by private investments and proposals” and must be delivered at “no additional cost to government.”

Mt Gilead is recognised as being strategically essential to the survival of the 500-1,000 Greater Macarthur koalas as the property is home to three of the six east-west koala habitat corridors in the area that link the Nepean and Georges rivers, with its corridors offering the koalas the shortest route between the two. To the west, the property also borders the banks of the Nepean River, which is one of the koalas' primary habitat corridors.

Koalas in NSW are on track to become [functionally extinct before 2050](#) and the healthy and still expanding Greater Macarthur region population - the only koala population left in Greater Sydney - has been described as [pivotal to the species' survival](#) in NSW.

Lendlease was allowed to apply for biodiversity certification for its Mt Gilead development in two stages and now argues that the subsequently approved Campbelltown City Council's Koala Plan of Management (CCKPoM) and the newly strengthened Koala Habitat Protection SEPP 2021 do not apply to Mt Gilead Stage 1 (MGS1).

Both the state and federal governments have conferred biodiversity certification on MGS1 - the 208.89 ha Fig Tree Hill Estate. Once conferral is granted, under Part 4 of the *Environmental Planning and Assessment Act 1979*, a consenting authority is not required to take into consideration the likely impact on the biodiversity of the development carried out on that land when considering future Development Applications (DAs).

The CCKPoM was not approved by the state government before biodiversity certification for MGS1 was granted, and the Koala SEPP which applies to this area has subsequently been strengthened to offer the koalas more protection by, for example, broadening the definition of koala habitat.

Whilst the Campbelltown City Council [supported](#) Lendlease's position that biodiversity certification exempts the land from the provisions of the [Koala SEPP 2021](#) and the application of the CCKPoM,¹ late last year the Council's Local Planning Panel imposed a consent condition on a MGS1 Development Application (DA) requiring a minimum 250-metre width koala habitat corridor along Menangle Creek.²

This condition was designed to bring the biodiversity offsets on MGS1 more in line with the recommendations for protecting koala habitat in the CCKPoM, subsequently reinforced by the NSW Chief Scientist and Engineer's April 2020 report, [Advice on the protection of the Campbelltown Koala population](#) (CS&E Report), which was commissioned by the Environment Minister, the Hon Matt Kean, to consider how koala habitat in the Campbelltown area could best be protected from development.

The CS&E Report identified four koala habitat corridors on Mt Gilead - the primary habitat corridor along the Nepean River, and three east-west corridors - Menangle, Nepean and Woodhouse Creeks - which provide connectivity for the koalas between the Nepean and Georges Rivers.

The critical importance of protecting these koala habitat corridors was highlighted:

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

Lendlease has indicated that it will likely challenge the condition imposed on the DA for MGS1 to enhance the width of the koala habitat corridor along Menangle Creek. In a recent court case, Lendlease argued that the condition was invalid because the land had already been

¹ Campbelltown City Council Local Planning Panel 2020, p. 495. The assessment report for a development application lodged for MGS1 notes that "Notwithstanding, although biodiversity certification has been conferred on the land, the application was accompanied by advice prepared by Ecological Australia outlining how the proposal is not inconsistent with the CCKPoM."

² Campbelltown City Council 2020. [Minutes Summary Local Planning Panel Meeting held on Wednesday, 16 December 2020.](#)

biodiversity certified and rezoned for residential development.³ A new Planning Proposal for MGS1, recently placed on public exhibition, has not been revised to reflect the increased width of the Menangle Creek koala habitat corridor.⁴

The above example highlights that exempting developments that have already achieved biodiversity certification from the application of the Koala SEPP is problematic because it undermines the intent of the SEPP to protect koala habitat where it is found.

Lendlease was able to achieve biodiversity certification by offsetting the impact on koala habitat through making a cash contribution to an existing biobank site

At the time it was introduced, the NSW Government's *Biodiversity Offsets Policy for Major Projects* was [heavily criticised because it replaced the "like for like" rule with the option to buy/manage sites far away from the impacted site](#) or to pay money into a fund as compensation for the clearing of land containing threatened plants and animals.

Unlike the Koala SEPP 2021, which aims to protect the totality of the site based on its vegetation characteristics, the BOS doesn't require offsetting to maintain or enhance species' habitat in close proximity to the development site or even in the local area. Rather, it applies a whole of region view to achieve a standard of 'no net loss' of biodiversity, meaning biodiversity losses on a localised scale, including impacts to local habitat, can be offset somewhere else.

These provisions seem to undermine the intent of offsets, which are predicated at both the state and federal government level to be used only when efforts have been made to either avoid or mitigate environmental impacts.”⁵

To achieve biodiversity certification under the NSW Threatened Species Conservation Act 1995 (TSC Act) for MGS1, for example, Lendlease was allowed to make cash contributions for the enhancement of the neighbouring Noorumba Council Reserve (equivalent to 21.27 ha) instead of protecting the equivalent amount of habitat on its own land.⁶

The decision to fund an existing biobank was [controversial](#) and initially challenged by the federal government's Department of Environment because it wasn't regarded as a 'like for like' biodiversity offset. The EPBC Act applies a higher standard to biodiversity offsets for protected matters, stipulating that they [must be 'like for like'](#).

Campbelltown Council's [decision to register Noorumba Reserve as a biobank site](#) in 2015 was also controversial because it was already an established reserve. At the time the decision

³ Save Sydney's Koalas (South West) Inc v Lendlease Communities (Figtree Hill) Pty Ltd, Land and Environment Court, 26-28 April 2021. Judgment pending.

⁴ Eco Logical Australia 2020b. Mt Gilead Stage 2 – Biodiversity Certification Assessment and Biodiversity Strategy. Prepared for Lendlease Communities (Figtree Hill) Pty Limited, 27 November 2020

⁵ Chief Scientist & Engineer 2020, p. 26. (CS&E Report)

⁶ The former NSW Office of Environment and Heritage [approved Noorumba as a biobank site](#) under a 1995 act that allows council reserves to be protected "in perpetuity" to generate offsets.

was made, the Council estimated that more than \$6 million could be secured from the biobank scheme due to the demand for critically endangered Cumberland Plain Woodland (CPW) and Shale Sandstone Traditional Forest for biodiversity offsets.

This example highlights how a market-based scheme for biodiversity offsets can lead to double-dipping by developers and cash-strapped councils, resulting in suboptimal outcomes for the protection of koala habitat.

As a [recent](#) Guardian article soberly observed:

Double-dipping has become an increasing problem in areas of urban sprawl, where endangered plants and animals are being squeezed out to make way for housing and infrastructure to support a rapidly growing population. In short, governments are using bushland that is already earmarked for protection and/or in public hands as offsets in order to greenlight more development

Lendlease was allowed to use offsite biodiversity offsets despite having suitable land available on its own property to accommodate the offsets

To meet the federal government's more rigorous offset requirements for biodiversity certification, Lendlease had to agree to put more biodiversity offsets in place to protect koala habitat. But rather than setting aside more land on MGS1, it chose to [offset the impact](#) offsite by retiring species credits at the Appin West Biobank site (equivalent to 21.13 ha).⁷

Locals in the area who track koalas have questioned the quality of this offset as wildlife habitat offset. Whilst it contains critically endangered Shale Sandstone Transition Forest, it borders South 32's coal mine pit stop and covers an inhospitable rock face on the edge of the Broughton Pass Gorge where it crosses Douglas Park Drive.

Unfortunately, the real reason why Lendlease has balked about setting aside more koala habitat on its property appears to be commercial. Representatives at a hearing for the [Legislative Council's Inquiry into koala populations and their habitat in New South Wales](#) admitted that the development would become "unprofitable" if the company was required set aside more koala habitat.⁸

Lendlease's application for biodiversity certification for Mt Gilead Stage 2 (MGS2) also proposes purchasing biodiversity offsets offsite.

Despite Lendlease claiming that its project will "deliver an exemplar urban development that rehabilitates the environment and allows the nearby local koala population to thrive and

⁷ Ibid

⁸ Planning and Environment Committee, NSW Legislative Council 2020, p. 28

expand in and through the lands at Gilead,” Lendlease also can't seem to find enough land on the much larger MGS2 site to retire all of its species impact credits.

The Biocertification Assessment Report (BCAR) & Biodiversity Certification Strategy for MGS2 (27 November 2020), which was prepared for Lendlease by Eco Logical, and is now being assessed by the Department of Planning, Industry and Environment (DPIE), states that Lendlease plans to offset a "deficit of credits for the Squirrel Glider (320), the Koala (767), and the Southern Myotis (226) through "the purchase of additional species credits from registered Biobank or Biodiversity Stewardship sites in the region or via the purchase of biodiversity credits from the Biodiversity Conservation Trust (BCT)."

Lendlease has challenged the recommended width of the koala habitat corridors on its property

In the Gilead Koala Conservation Plan (GKCP), Lendlease argues that the average corridor width of 425 metres, as prescribed by the CCKPoM and supported by the recommendations of the CS&E Report, are unnecessary because:

- available studies in the Campbelltown LGA show that koalas will use areas with a narrower width;
- according to the CCKPoM, 425 m corridors are only required in areas where intergenerational persistence of koalas has been mapped (which apparently is not the case at Mt Gilead);
- Corridor width sizes in the CCKPoM are determined by female home ranges, which can vary widely throughout the region.

These arguments were refuted by the author of the CCKPoM, Dr Stephen Phillips, who was asked by Campbelltown Council to peer review two reports advancing the above that were prepared by Eco Logical Australia on behalf of Lendlease.⁹

Very few of the recommendations made for protecting the koala habitat corridors in the CS&E Report are reflected in the application for biodiversity certification of the conservation plan for MGS2.

With respect to the number of corridors, for example, the CS&E Report states that all four corridors across Mount Gilead should be adequately protected to stop a koala population sink in the Nepean Gorge, ie. “dead ends where koalas face threats without routes of escape.”

Lendlease, however, has chosen to only focus on widening the Woodhouse Creek Corridor. Its conservation plans give scant regard to protecting the Nepean River Corridor, which was

⁹ Biolink 2020. *Gilead Stage 2: A Commentary on Koala Carrying Capacity and Corridor Review Reports prepared by Eco Logical Australia on behalf of Lendlease Communities (Figtree Hill) Pty. Ltd.* Advice to Campbelltown City Council, June 2020

identified as a primary koala habitat corridor by the DPIE in its report, [Conserving Koalas in the Wollondilly and Campbelltown Local Government Areas](#).

This omission was, in fact, noted in the Campbelltown Council Officer's Report of 9 December 2020 that preliminarily assessed the MSG2 biodiversity certification application before forwarding the application to DPIE for approval. It said that:

*Further clarification is also required from DPIE in relation to how the required corridor widths and buffers within the CS&E Report (average width of 390-425 plus 30m buffer if koala exclusion fencing is provided) relates to the Nepean River Corridor. **The Nepean River Corridor has previously been identified as a primary koala corridor within the Greater Macarthur 2040 Interim Plan and a minimum preferred width of 425 m specified.** It is also unclear as to how potential impacts to Ground Water Dependent Ecosystems would be assessed as part of the biodiversity certification process.*

The Nepean Creek corridor has also been ignored in the conservation plans for MGS2. Essentially its sacrifice highlights the difficulty of accommodating koala habitat into a massive residential housing development footprint.

As the CS&E Report notes:

This corridor will have a significant edge effect from the urban development surrounding all aspects of it...Flat topography means that development could create a narrow corridor. Power lines, gas lines and a proposed busway will create reasonably wide hostile area. Very little vegetation over the gas main crossing.

The CS&E Report explains that the Nepean Creek Corridor "provides an example of where planning considerations across both MGS2 and the Cumberland Plain Conservation Plan (CPCP) need to be considered jointly, as decisions in one footprint impact the relative priority of approaches in the other planning area."

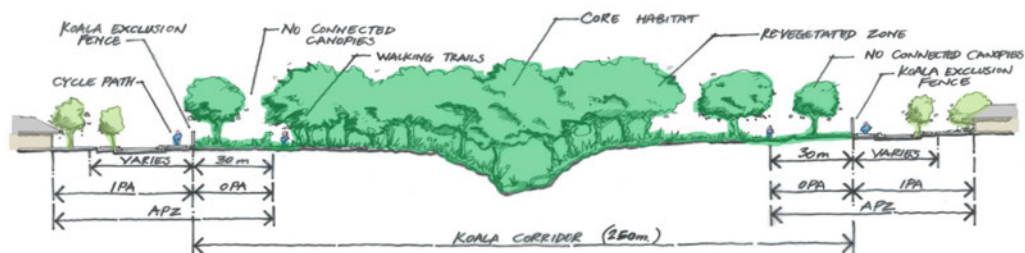
The CPCP is a biodiversity offset plan that will facilitate the release of around 10,000 hectares of rural land for urban development over the next 20 years, putting even more pressure on the local koala population.

Notably, the former Office of Environment and Heritage (OEH) warned in its *Recommendation Report for the Biodiversity Certification of Mount Gilead Stage 1* that "the [proposed change](#) from rural to urban development will have significant implications for the biodiversity of the region, including the significant koala population."

Allowing further development in this already fragile environment also raises questions about whether [the precautionary principle](#) has been given due respect. It is meant to inform federal

and state environmental legislation by taking into account uncertain but potentially serious and/or irreversible threats of harm to the environment or a threatened species.

The CS&E Report states that “every opportunity to maintain or increase the width of corridors should be taken” but the Campbelltown Council Officer’s Report notes that Lendlease’s koala corridors still include “buffers” in the average width calculations, and “sections of the corridor include certain retained land, open space, drainage areas, bio-retention basins, and outer APZs along with existing conservation measures and an area to the east of Appin Road.”



SECTION A: WOODHOUSE CREEK CORRIDOR

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This diagram highlights how contrary to the advice of the CS&E Report, Lendlease’s proposed design for the Woodhouse Creek Corridor includes the 30 m buffers on either side in the corridor’s 250 m width. Source: Eco Logical MGS2 biodiversity certification application.

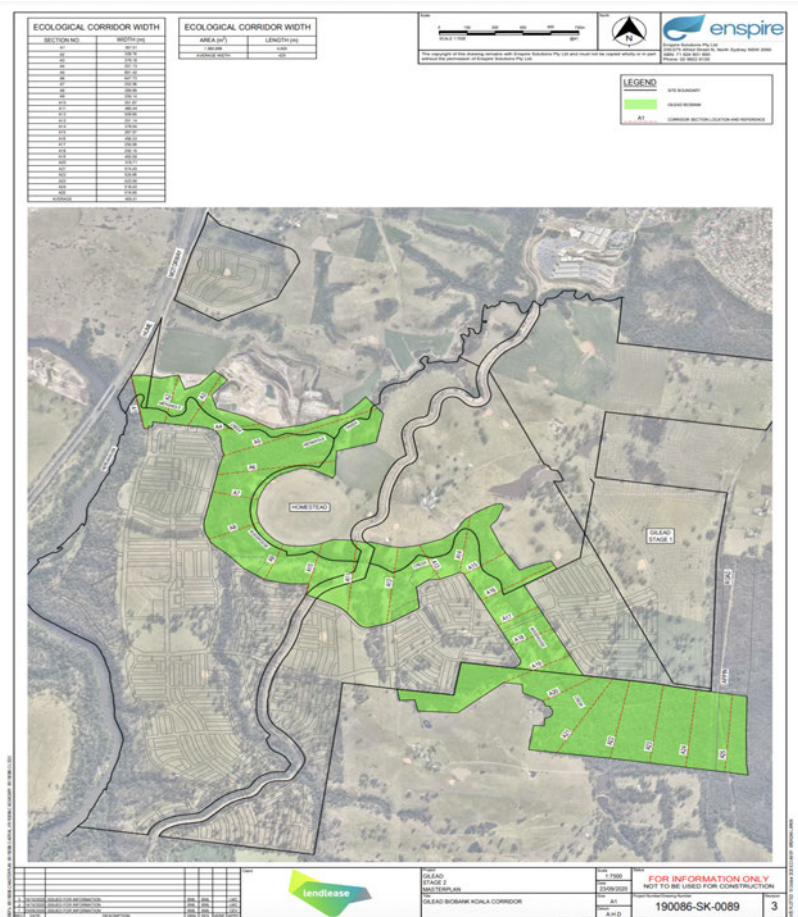
The inclusion of these ancillary functions into the design of the koala habitat corridors is contrary to the recommendation of the CS&E Report. Lendlease has also included parts of the heritage precinct, the two adjoining neighbouring biobanks and the proposed biobank site on the opposite side of Appin road to artificially inflate the average width of the Woodhouse Creek corridor.

Dr Phillips highlighted the importance of designing koala habitat corridors of an appropriate width in his report, *Gilead Stage 2: A Commentary on Koala Carrying Capacity and Corridor Review Reports prepared by Eco Logical Australia on behalf of Lendlease Communities (Figtree Hill) Pty. Ltd.* The report countered assertions made by Eco Logical and Lendlease in its GKCP that 425 m wide corridors were unnecessary:

To be transparent and statistically robust, the width of the corridors is to be measured at 200 m intervals along the entire width of the corridors with a standard margin of error of no less than 85 m - 90 m. This approach will ensure (with 95% confidence) that some parts of the Strategic Linkage Areas (SLAs) are at the optimum width range of 409 - 425 m.

Dr Phillips further explained why optimally sized koala habitat corridors are so important to the koalas' prospects for future survival:

Specifically that the optimal width falls within the range of 409 m - 425 m, along with recognition that it is in fragmented/developed landscapes where the matter of corridor/linkage width becomes an important consideration if koala population dynamics (recruitment/dispersal) and effective gene flow is to be maintained.



This map of the proposed Woodhouse Corridor on Mount Gilead and the neighbouring Beulah biobank (lower right hand corner) shows how the corridor widths have been measured at 200 m intervals, in line with Dr Phillips advice. It highlights, however, how the average width of the corridors on the Mt Gilead property is closer to 250 m, not 409 - 425 m, as Dr Phillips advised. Source: GKCP

Worryingly, the BAM doesn't include the cleared rural land in the calculations used to determine the number of species credits required to offset the impact of development on koala habitat even though cleared land is integral to the design of the Strategic Linkage Areas (SLAs) or koala habitat corridors.

This major flaw in the design of the BAM has allowed Lendlease to falsely claim that the conservation plan proposed for MGS2 will achieve 'no net loss' biodiversity outcome.

Eco Logical's assessment for MGS2, for example, states that "All remnant vegetation mapped as intact, thinned/modified or scattered paddock trees, has been considered as Koala habitat for species credit calculations."

The failure to include cleared rural land in the assessment of the development's impact on the koala habitat is also contrary to DPIE's definition of primary, secondary and tertiary corridors as reflected in its report, [Conserving Koalas in the Wollondilly and Campbelltown Local Government Areas](#):

- Primary corridors were those that contained 'core' koala habitat which were contiguous (gaps between trees less than 100 m) and were greater than 380 ha in size.
- Secondary corridors were those that contained 'core' habitat patches and smaller habitat patches or scattered trees that were separated by more than 100 m (were not contiguous), or were narrow or had pinch points less than 50 m wide and contained between 100 ha and 380 ha of 'core' habitat. Secondary corridors sometimes comprised 'core' habitat that totalled more than 380 ha and were wider than 50 m, but where this was the case, they were classified as secondary corridors if they did not connect to primary corridors on both ends.
- Tertiary corridors were those that contained patches of High Quality Habitat (HQH) that were poorly linked to primary corridors, contained between 30 ha and 100 ha of HQH, and did not connect to primary corridors on both ends. Tertiary corridors sometimes contained more than 100 ha of habitat, but where this was the case, they were classified as tertiary corridors if they did not connect to other corridors on both ends.

Unfortunately, the [BAM](#) only talks about "locating the project to avoid severing or interfering with corridors connecting different areas of habitat" and designing "project elements to minimise interactions with threatened and protected species and ecological communities, eg. designing fencing to prevent animal entry to transport corridors."

Given the importance of the koala corridors on this property for the survival of the koalas in the area as a whole, the BAM should not be used as a tool for assessing the environmental impact of the development proposed for MGS2.

Rather, the project should be assessed according to how well it complies with the CCKPoM and the CS&E Report recommendations, both of which provide detailed information on how koala habitat should be protected on Mt Gilead and in the surrounding areas.

Serious questions also need to be asked about whether the Biodiversity Certification application for MGS2 properly considered the impact of the proposed development on the site's significant water and heritage assets.

Whilst the Campbelltown Council Officer's Report doesn't discuss WaterNSW's concerns about the Biodiversity Certification application for MGS2, an earlier Campbelltown Council report on the Draft Local Housing Strategy (29 September 2020) noted that Water NSW was concerned about whether the state-heritage listed Upper Canal on the property would be adequately protected. 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:

WaterNSW 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. The Upper Canal Corridor is a Controlled Area declared under the Water NSW Act 2014 and Water NSW Regulation 2020, and public access is prohibited."

In the same correspondence, WaterNSW also advised Campbelltown Council that Lendlease may need to revise downwards the lot yield projections for MGS2 in light of the recent 28 August 2020 listing of the Mount Gilead Estate on the State Heritage Register.

Whether Lendlease has heeded the above advice isn't clear because a Planning Proposal for MGS2 has not yet been developed. The Campbelltown Council Officer's Report, in fact, highlighted the pitfalls of not running the Biodiversity Certification application and the Planning Proposal approval processes concurrently, noting "the potential risk of major transport routes or other utilities impacting on agreed conservation measures."¹⁰ To date, plans for the upgrade of Appin Road have not been finalised and the routes for the link and orbital roads are still being investigated. The design and placement of the two possible fauna crossings across Appin Road on or near the Mt Gilead property have still not been settled.

Both MGS1 and MGS2 will also impact the Cumberland Plain Woodland (CPW) and Shale Sandstone Transition Forest (SSTF), which are listed as critically endangered and are not meant to be disturbed.¹¹

These communities are defined as 'red flag areas' under the BAM because they are recognised for their high biodiversity conservation value. Special permission was required from the NSW Environment Minister to destroy red flag areas when biocertification was sought for MGS1.¹² A red flag area variation is also being sought for MGS2.¹³

¹⁰ Campbelltown City Council, Ordinary Meeting Agenda, 8 December 2020 p. 3

¹¹ Eco Logical Australia 2020a. The proposed plan for MGS2, for example, will impact 10.53 ha of SSTF, 8.99 ha of CPW SPW and 0.03 ha of CPW SHW in 'moderate to good' biometric condition, 4.31 ha of vegetation within riparian buffers, and 6 individuals of the endangered plant *Pomaderris brunnea*, which are categorised as 'red flag areas' or 'area of high biodiversity conservation value' by the BCAM.

¹² Eco Logical Australia 2018, p. 11

¹³ Eco Logical Australia 2020a, p. 1

Conclusion

Shortly after the state government granted biodiversity certification to MGS1, one of the area's leading koala experts, Dr Robert Close, told the Sydney Morning Herald that:

*Even if Leadlease was able to improve the quality of remnant bushland, koalas would likely be forced elsewhere. Theoretically, human settlement need not necessarily be fatal, but the corridors would have to be intact, car speeds would have to be low, dogs would have to be small, tree plantings would have to be suitable – I doubt whether residents would obey.*¹⁴

His warning was echoed by the CS&E Report, which noted that “due to the large time lag between new developments and impacts on koala numbers, it may be difficult in the near term to fully understand population impacts caused by urbanisation.”¹⁵

Whilst Lendlease claims that it will “deliver an exemplar urban development that rehabilitates the environment and allows the nearby local koala population to thrive and expand in and through the lands at Gilead”, the conservation measures it has advanced to date do not comply with the recommendations of the CS&E Report or the CCKPoM.

Even Eco Logical's Robert Humphries, an adviser to Lendlease on its strategy to protect koala habitat at the Mount Gilead development, has warned that the environmental stress on koalas from the proposed urban development in Campbelltown will make them more susceptible to 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.*¹⁶

The fact that Eco Logical could nevertheless argue that the conservation plans for MGS1 and MSS2 comply with current biodiversity offsets requirements and achieve a ‘no net loss’ biodiversity outcome explains why both the [Auditor General](#) and the recent [review](#) of the EPBC Act have criticised biodiversity offset regimes as opaque, poorly designed and managed. In fact, the Chair of the Review, Professor Graeme Samuel, [concluded](#) that “offsets do not offset the impact of development, and overall there is a net loss of habitat.”

¹⁴ Hannam, P. 2018

¹⁵ Chief Scientist & Engineer 2020 (CS&E Report), p. v..

¹⁶ On 3 October 2019 Steve McCann, Chief Executive Officer and Managing Director of Lendlease wrote to Stephen Palethorpe, Committee Secretary Environment and Communications References Committee, to respond to TEC's submission to the Inquiry into Australia's faunal extinction crisis.

Unsurprisingly, Samuel's [acknowledged](#) that the suboptimal design of biodiversity offset schemes make them vulnerable to exploitation by developers:

The stated intent of the offsets policy is to encourage proponents to exhaust reasonable options to avoid or mitigate impacts. In practice, offsets have become the default negotiating position, and a standard condition of approval, rather than only used to address residual impacts.

Lendlease's biodiversity conservation measures for MGS1 and MSS2 are arguably two of the most striking examples of how the NSW's BOS has allowed the interests of the developer to be put ahead of the interests of the environment and especially the koalas who rightfully also call this area home.

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