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Referrals Gateway
Assessments and Governance Branch
Department of Agriculture, Water and the Environment
GPO Box 787
Canberra ACT 2601

Via E-mail: epbc.comments@awe.gov.au

5th February 2020

Dear Delegate,

RE: EPBC 2019/8587 - Gilead Stage 2 Development - Objections

Bushfires: The recent unprecedented bushfires have dramatically changed the Koala survival equation and highlighted the need to be more robust in defending habitat and protecting corridors. Lendlease's submissions have not taken these changed circumstances into account.

Corridors: We object to the Stage 2 - Gilead development as it cuts across Koala corridors, and for the ones kept it does not provide enough width for them to be effective. Further, Stage 2 is dependent on Stage 1 and an Appin Road upgrade. Both of these developments either squeeze corridors or in the case of the Appin Road upgrade block them all together¹.

Governance: Evidently, agency capture of NSW Planning by Lendlease means it can not be entrusted to put Koala welfare ahead of Lendlease's interests (the Appin Road upgrade and the OEH/DPE echo response testifies to this; see below). Unfortunately, that Koala protection role falls to the federal government,

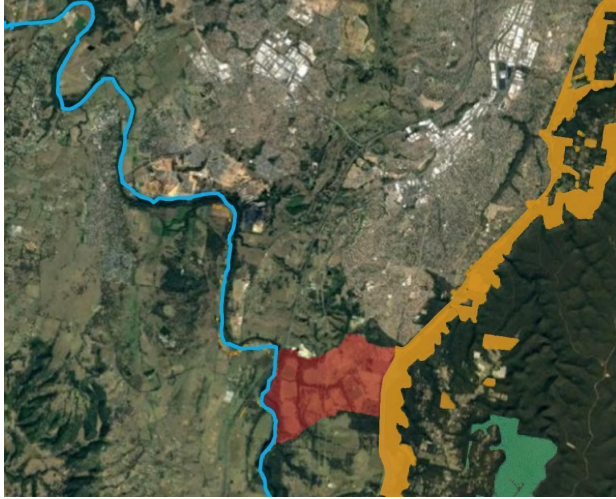
¹ At the LL AGM 20th November 2019, Chairman Michael Ulmer gave an undertaking to provide 2 overpasses at Noorumba and Beulah, however staff at the AGM made them contingent on RMS approval, and the steel bridges put forward have no evidence of working for Koalas anyway.

notwithstanding the concerning removal of the 'Koala Recovery Team' oversight for Gilead's Stage 1 approval.

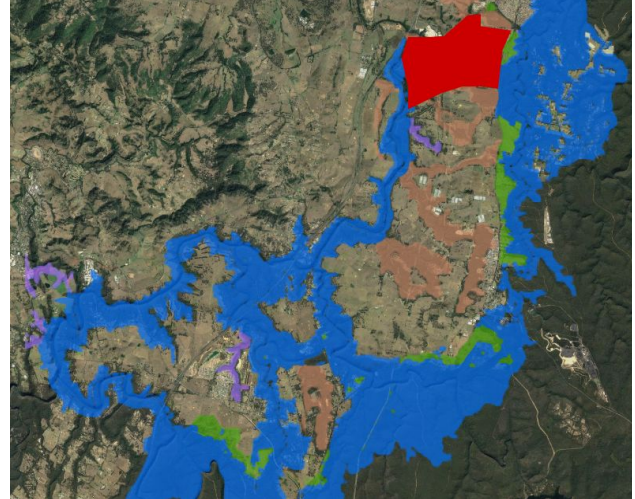
Biobanks: The apparent application of an EPBC Biobank in Noorumba, after it was disallowed in Stage 1, is concerning. The staging of Biobanks as the development progresses is problematic as corridors and connectivity rely on these being interconnected and complete at the very beginning. A Biobank deficit created on a site of such strategic importance is deeply problematic, as connectivity is the most valuable quality in Koala habitat here. No other off-site will be as strategically positioned.

Conditions: The 20 September 2019 variation of condition 7 of the Gilead Stage 1 conditional approval, carried out at Lendlease's request, removed the need for a 'Koala Recovery Team' and thus independent oversight of Lendlease's Koala Management Plan (subsequently approved in December 2019). This casts doubt on the EPBC's ability to enforce conditions upon Lendlease that are deemed inconvenient. We are pleased and yet perplexed that the Federal Minister for Environment, Ms Sussan Ley, has planned to instate a national Koala Management Plan and a Koala Recovery Team, mere days after approving Lendlease's application that had removed the need for one. We would expect a 'Koala Recovery Team' to provide conditional oversight for Gilead - Stage 2.

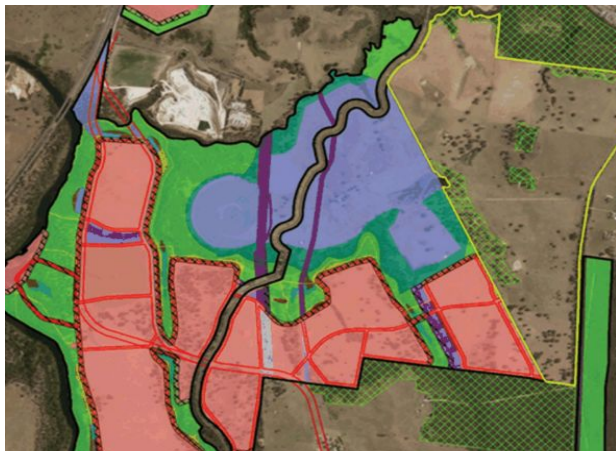
Position: Gilead's position is unique and of critical importance, strategically speaking, for wildlife and koalas, as demonstrated in the images below. For Lendlease though, this is no more than an anywhere project for Sydney.



The red area above - Gilead (Stage 1&2) - is of great strategic value, because of the near confluence of Sydney's two major rivers, the Georges (yellow west bank shown) and the Nepean (in blue). Gilead is the shortest, northernmost bridge between these two extensive riparian zones - natural wildlife corridors.



The red area above again is Lendlease's Gilead (Stage 1&2) development. All the coloured areas indicate roughly the different widths of treed Koala habitats; purple (narrow), orange (wider), and blue (widest). They nearly all follow riparian zones. We can see how Gilead completes the loop for Macarthur Koala movements.



The coloured area above is Gilead Stage 2. The yellow outline is Stage 1.



The pink area above is Gilead Stage 1. The yellow areas are Koala corridors, mainly through Stage 2.

The Bushfire Crisis demands a re-appraisal of the Koala

The **2019/20 summer firestorm** has elevated our already heightened concerns in regards to Lendlease's Gilead development and the cutting of the Campbelltown Koala colony's corridors and habitat. There are three effects caused by this season's unprecedented fires that relate to this development:

1. **The Campbelltown colony is exceptional:** The good news is that the Campbelltown colony has remained fire unaffected, and being Chlamydia free it continues to grow. Elsewhere, the Koala habitats (and likely populations) of the Blue Mountains (80% burnt)², North Coast (30% burnt)³ and South Coast (unquantified) have been devastated. The health of the Campbelltown colony, therefore, has become 'critical'⁴ to the longevity of the NSW Koala population. Lendlease's development continually downplays the importance of this colony, with housing put ahead of the colony's health.
2. **Corridors are vital:** Gilead is important to the Campbelltown colony not so much for its habitat (which is also important) but for its position. Gilead sits exactly at the crossroads of the vital north-south and east-west links between and along the Georges and Nepean Rivers. The fires have highlighted how crucial corridors are to wildlife survival as both an escape to fire and a path to recolonise habitat. Lendlease's development will fragment this colony, as is their intention.
3. **Koalas are now functionally endangered:** After this summer, the Koala's conservation status has undoubtedly deteriorated from 'vulnerable' to 'endangered' under the EPBC Act, at least in NSW. Considering the astonishing devastation in other Koala habitats across Australia like Kangaroo Island (80% burnt)⁵, Adelaide Hills⁶ and even French Island, the conservation status of the Koala as a threatened species needs urgent reassessment.

²<https://www.sbs.com.au/news/it-s-huge-fears-80-per-cent-of-nsw-s-iconic-blue-mountains-lost-to-bushfires>

³<https://www.theguardian.com/australia-news/2019/dec/27/australias-environment-minister-says-up-to-30-of-koalas-killed-in-nsw-mid-north-coast-fires>

⁴ Mid november Cheyne Flanagan, director of the Port Macquarie Koala Hospital on ABC702 radio stated, following the North Coast fires, that the Campbelltown colony had now become 'critical' to Koala survival in NSW.

⁵ https://www.vice.com/en_au/article/akw34p/how-kangaroo-island-is-rehabilitating-their-burned-kangaroos

⁶

<https://www.adelaide.edu.au/research/news/list/2020/01/15/understanding-the-true-impact-of-bushfires-on-our-koala-population>

Lendlease's application does not account for this dramatic deterioration in the Koala's circumstances.

Lendlease has and will continue to fragment Gilead

Lendlease's Stage 2 Gilead development is predicated on two other developments proceeding: Stage 1 of Gilead; and an upgrade of Appin Road (the closest main road). Both of these previous applications have blatantly put their expediency above Koala movements and against independent expert advice. Stage 2 is a continuation of this dismissive attitude.

Corridors are vital

Koala corridors are vital. This is a well established principle in Koala management.

*'Koala populations need large areas of connected habitat to maintain their viability. Habitat loss and fragmentation has resulted in population decline and has been identified as a significant threat to the species persistence in NSW.'*⁷

NSW Chief Scientist 2016.

The function of these corridors within Gilead was and is recognized as being vital.

*'There is a need to build resilience into these recovering koala populations so that they are capable of better withstanding the impacts of future development and stochastic impacts such as fire. ... In order to do this, viable linkages and associated habitat patches need to be secured across the landscape.'*⁸

Biolink 2018. Koala Corridor Project: Campbelltown & Wollondilly LGAs.

These corridors were clearly identified in the Campbelltown Plan of Management (CKPoM) 2016, and confirm the assertion that the Gilead region is a particularly important link.

In the image below, taken from Page 31 of the CKPoM, Gilead in the extreme bottom left corner. It has identified 3 east-west Habitat Linkage Areas (HLAs)

⁷ NSW Chief Scientist & Engineer 2016. Report of the Independent Review into the Decline of Koala Populations in Key Areas of NSW December 2016

⁸ Biolink. 2018. Koala Corridor Project: Campbelltown & Wollondilly Local Government Areas. Biolink Ecological Consultants, Uki, NSW. Report to NSW Office of Environment & Heritage.

connecting the Georges to the Nepean river. This is logical, as to the immediate north is suburbia. The Campbelltown Koala Plan of Management was a collaboration between Campbelltown City Council, the NSW Office of the Environment and Heritage, and Biolink (an independent expert).

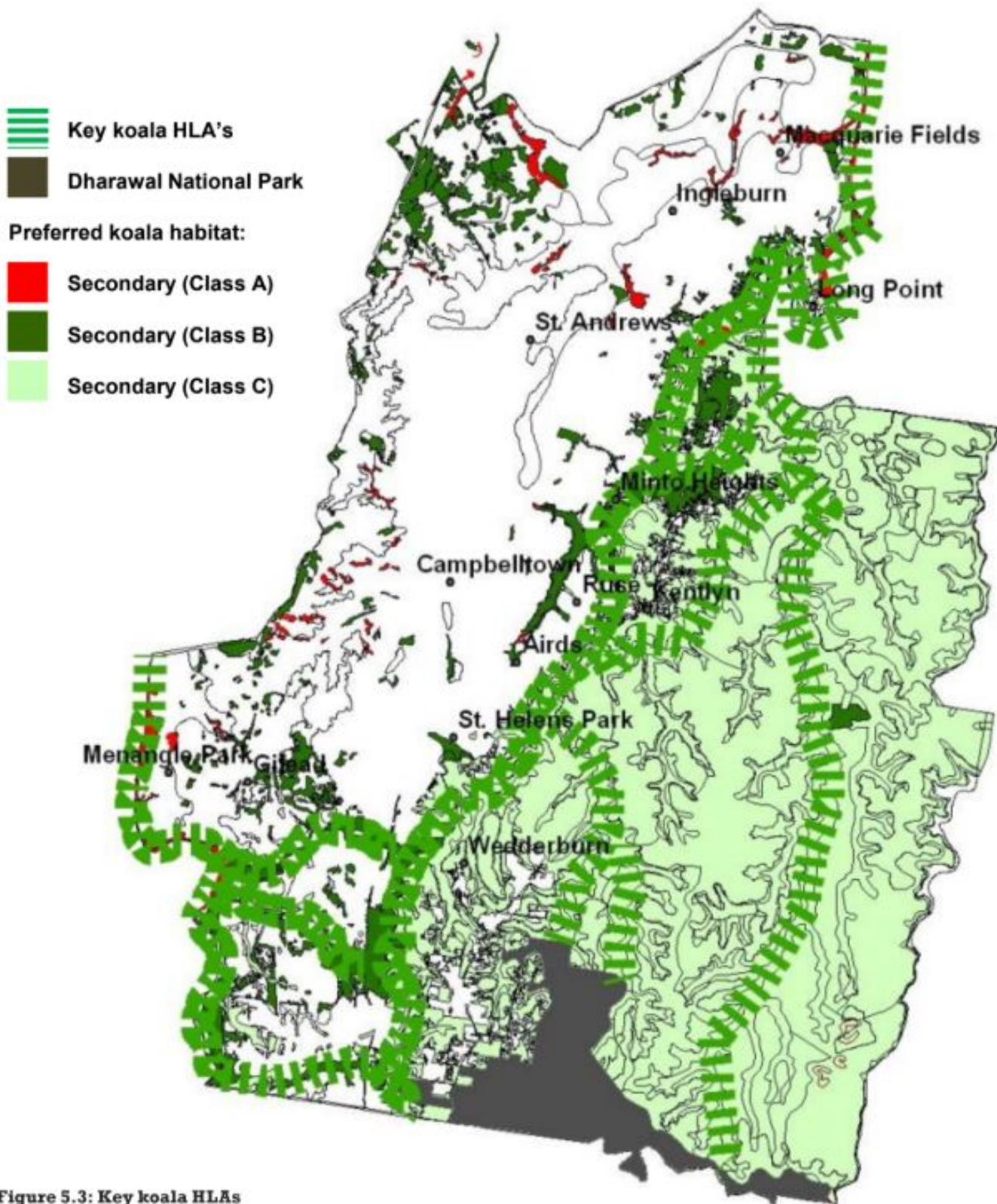


Figure 5.3: Key koala HLA's

Appin Road Upgrade - Blocking corridors

In spite of their vitality, these Koala corridors were dismissed by Lendlease and RMS out of hand in one paragraph in a 2018 co-authored report.

Due to the fragmented and relatively small extent of Koala habitat, limited existing records, the proposed significant increase in future residential development to the west of Appin Road and the associated increase in edge effects detrimental to the Koala, the Secondary east- west corridor identified within the draft Campbelltown Koala Plan of Management (CKPoM) (Biolink Ecological Consultants 2016) for the study area is unlikely to be of vital importance to the local Koala population.”

This expediency and disdain for governance was then used to abolish any corridors for Koalas through Gilead, which effectively amounts to a ‘localized Koala extinction plan’. The green dotted fence as seen in the adjacent image is exclusion fencing, used to keep Koalas from the ‘pink areas’ (Lendlease’s developable areas), and collaterally the mid-blue Koala corridors are identified in the CKPoM as important HLAs. The fencing also sterilizes the existing Biobanks of Noorumba and Beulah, and makes onsite Stage 1 Biobanks useless as Koala credits.



Perhaps most concerning is that OEH (now DPIE) put aside their own co-authored CKPoM of 2016 that highlighted HLAs, and in favour of a new report with concluding remarks in line with Lendlease’s above.

Exclusion fencing progressively built along Appin Road would prevent east–west koala movements across the Greater Macarthur GA. Underpass structures would need to be built to provide east–west

⁹ Lend Lease Communities (Roads And Maritime). Appin Road Upgrade, Mt Gilead, Nsw Biodiversity Assessment. October 2018 WSP, p 59.

access to koalas. However, we do not consider the east–west corridors essential for the long-term survival of the regional koala population. Koalas could continue to move through the landscape via primary movement corridors, rather than via the east–west secondary corridors. The distance from the top of the Georges corridor to the Cataract corridor is approximately 15 kilometres and is within the distance that koalas can disperse. Allowing koalas access to the secondary corridors would expose them to threats associated with residential areas and would be inconsistent with the second key principle of our strategy to conserve these koala populations (to separate koalas from residential areas).¹⁰

The final paragraph is a non-sequitur conclusion to the report itself. Both experts quoted as references in the report (Dr. Matthew Crowther and Dr. Steve Phillips) saw exclusion fencing as nothing more than a temporary measure, and emphasized the importance of east-west connectivity. Neither of the referenced papers quoted support the new report's final conclusion. The standing of this anonymous report has not been clarified, though it appears it is being used by DPIE to justify Lendlease expediency. This is concerning as it highlights Lendlease's ability to get NSW departments to clear regulatory inconvenient hurdles for Lendlease at the cost of the Koala.

Gilead Stage 1 - Removing corridors

TEC has had many issues with Lendlease's approach to Biobanks and Internal Connectivity for Stage 1. These have been thoroughly discussed in prior submissions, and will not be repeated here. However, TEC and the World Wildlife Fund have asked Lendlease to at least do its fair share in providing for east-west corridors along the Noorumba/Menangle Creek HLA. That is, half of 425m and at least 212.5m back from Menangle Creek.¹¹ They refused.

Below is the top of Stage 1, where the HLA was identified. The areas Lendlease put aside were related to necessary water detention areas needed for the project and Water Management Act creek setback requirements. Wildlife considerations were incidental to this action.

¹⁰ Conserving Koalas in the Wollondilly and Campbelltown Local Government Areas 2018 (OEH) and then in 2019 (DPIE).

¹¹ While outside this submissions ambit the Campbelltown Council Approval of <https://mountgileadestate.com.au> that sits at the of Noorumba Bush Reserve and at the edge of Menangle Creek, and along the Koala HLA does not appeared to have been referred to the EPBC as a controlled action.



The image below created by TEC is the width of a HLA of 425m overlaid onto the top of the Noorumba/Menangle Creek HLA and where it intersects with Gilead Stage 1. Here we can also see a Strategic Linkage Area (SLAs) between HLAs (also identified within the CKPoM) going south.



Gilead Stage 2 - Corridors left to Lendlease's discretion

EcoLogical Australia has overlaid the Primary Koala Corridors (these are the same as the Habitat Linkage Areas) as identified by the Campbelltown City Council (CCC) and OEH in the CKPoM, and again by CCC in the 2018 Biolink Report and those later emphasized by OEH. The 'orange lines' are the east-west corridors, and the 'light blue lines' are the north-south ones.

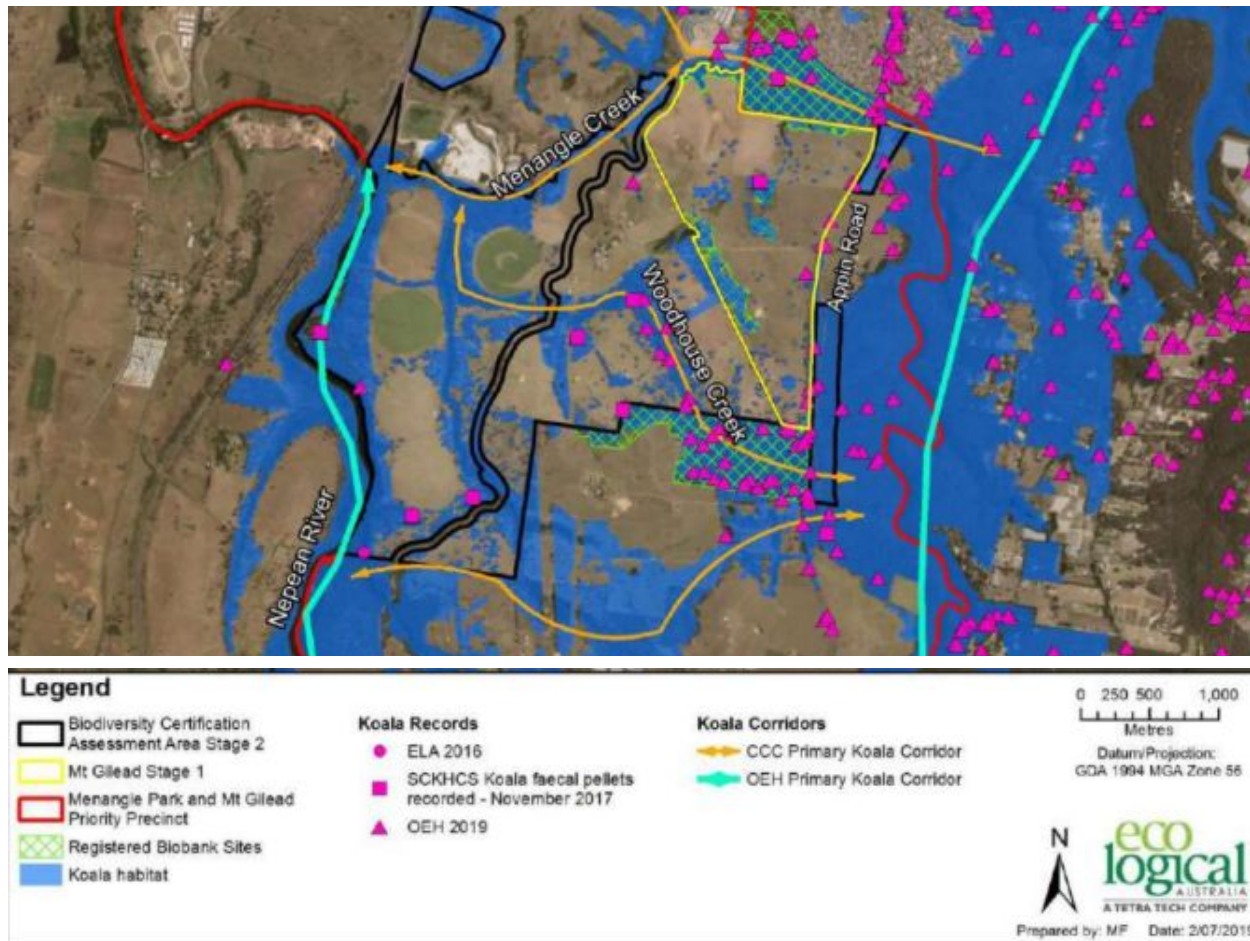
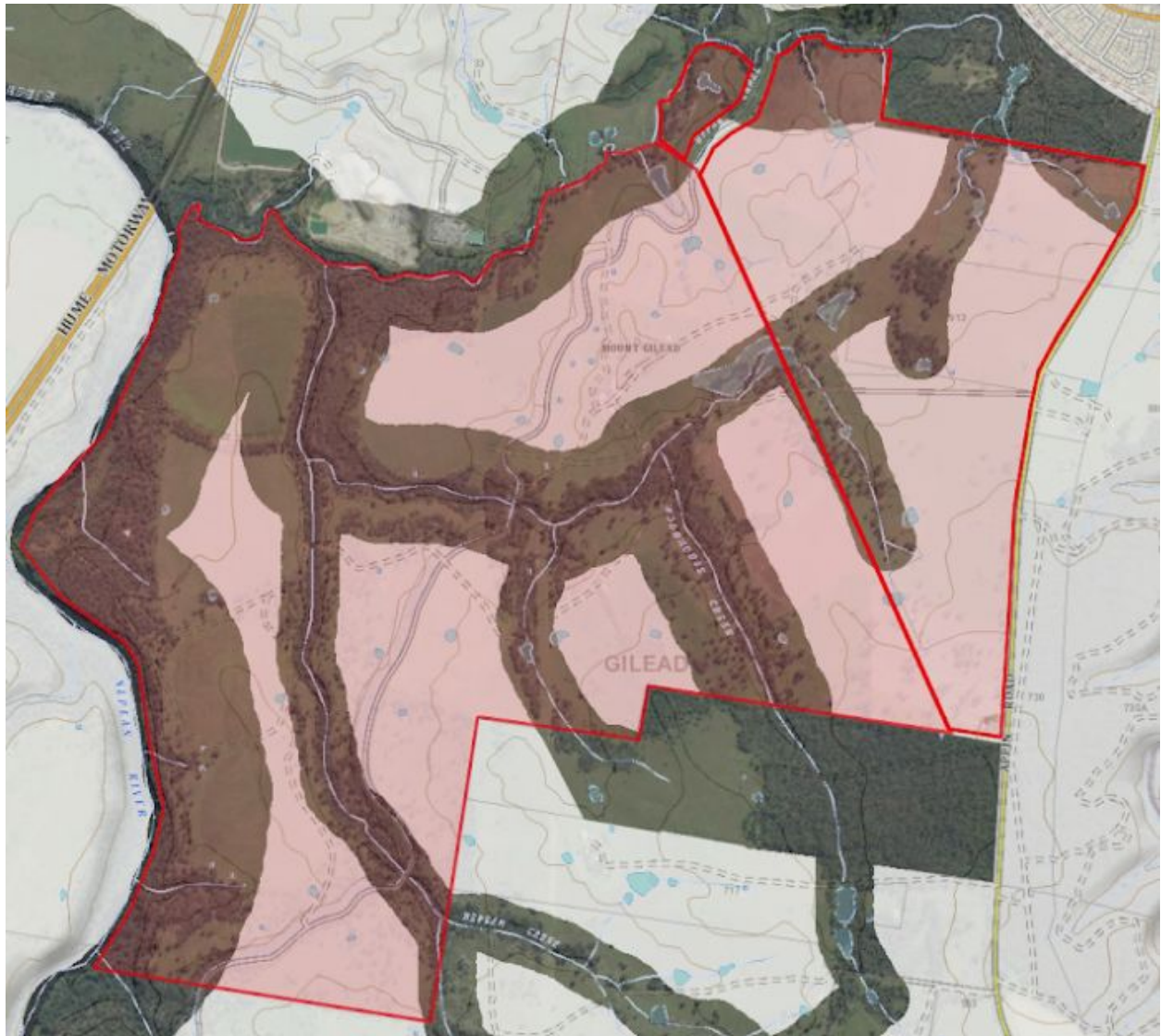


Figure 27 Records, Koala habitat and Primary/Secondary Koala movement corridors in the South Campbelltown Area (Council)

The optimal average corridor width for Koalas in Campbelltown has been calculated to be 425m, based on the home range size requirements for female Koalas in low carrying capacity landscapes (Biolink, 2017). In early 2018, a strategic Koala habitat and corridor study was undertaken across the Campbelltown LGA, exploring specific connectivity requirements for Koalas in order to calculate the least-cost dispersal pathways for the population. The results further informed local corridor planning for the Campbelltown LGA.

TEC has taken the HLA widths of 425m as identified in the CKPoM 2016 and Biolink 2018 report and connected the red flagged areas to HLAs with internal Strategic Linkage Areas of 200m as specified in the report.



The connection between the Menangle Creek and the Nepean river is of utmost importance for Koala movements. The area closest to the Nepean river is shared by both the Menangle Creek/Noorumba and the Waterhouse Creek/Beulah HLAs. Yet, as is demonstrated, Lendlease cuts this figure down to 120m. In a shared HLA scenario this should be no less than 212.5m ($425\text{m}/2$).

The Menangle Creek/Noorumba HLA is the most important east-west HLA as it connects the two rivers at the shortest, most northern point. Here Lendlease cuts it down to 85m in one section.

Lendlease provides a Woodhouse Creek/Beulah HLA of around 200m, not the 425m as required to be effective.

The Nepean Creek is not identified as a HLA but an SLA. As such, a minimum requirement of 200m is required, however below it is shown to be cut down to 80m. As Lendlease we suspect follows purely a Water Management Act riparian setback requirement.

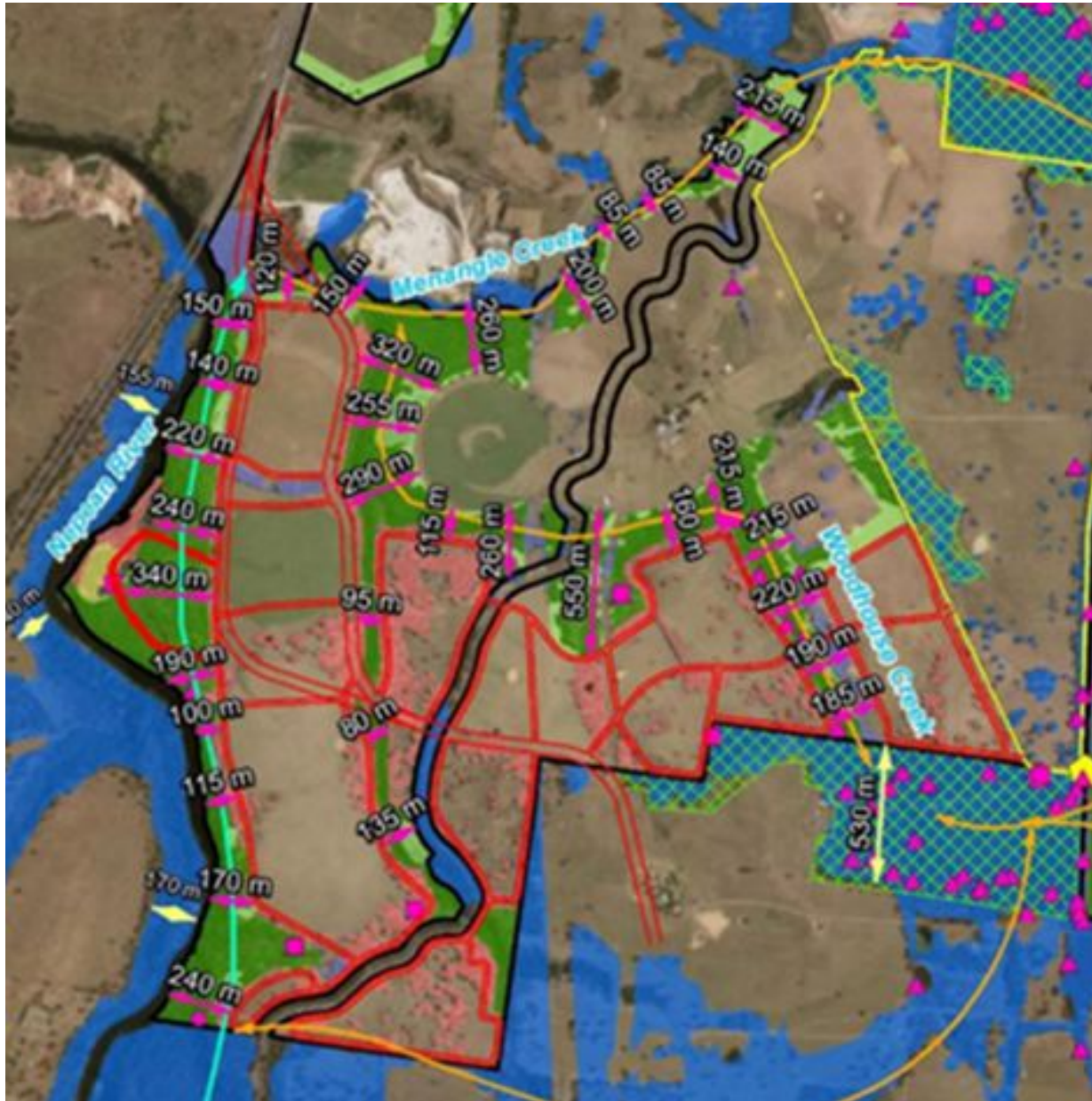


Figure 7: Proposed Koala corridors in Mt Gilead. Australia's faunal extinction crisis Submission 55 - Response to Submission 55 provided by Lendlease Add map from Lendlease response p. 15

Lendlease has clearly interpreted the Biolink Report 2018's minimum width requirements of 200m as a maximum, rather than a minimum. Above it is shown through Lendlease's own analysis that the Koala corridors are well under the optimal width required. This restriction, combined with the drastic reduction in connectivity, will severely diminish the ability of koalas to connect with other local populations.

Koala Plan of Management

NSW's main statutory Koala planning protection under SEPP44 is a Koala Management Plan (KMP). For Gilead, an independent Campbelltown Koala Plan of Management (CKPoM) signed off by Campbelltown Council, NSW Office for the Environment and an independent expert has been available since 2016. However, the NSW Department of Planning has put this CKPoM aside for LendLease, and allowed LendLease to commission their own expert KPoM¹² from EcoLogical. Unsurprisingly, their report is not as prescriptive as the independent CKPoM. The conflict of interest inherent in EcoLogical reporting on the best interests of the Koala and Lendlease, when only LendLease pays them, means these reports conclusions are hopelessly compromised and must be put aside and the **original CKPoM 2016 must be enforced.**

Biobank Credits

Noorumba credits were disallowed as EPBC credits in Stage One, as Lend Lease stopped Koalas reaching Noorumba with its exclusion fencing proposal running down Appin Rd. (indeed all on-site Koala credits on the western-side should have been voided with this policy). It appears that Lendlease is now trying to use these Noorumba credits for Stage 2.

¹² 'Eco Logical Australia 2019. Mount Gilead Residential Development – Koala Management Plan. Prepared for Lendlease Communities (Mt Gilead) Pty Ltd.'

Table 26: Summary of species credit surplus/deficit

Habitat	Credits Required	Credits generated (100% Measure)	Credit Status within BCAA
<i>Pomaderris brunnea</i>	338	1,380	1,042
Koala	1,901	1,202	-699
Squirrel Glider	1,339	1,198	-141
Cumberland Plain Land Snail	467	1,044	577
Southern Myotis	1,665	521	-1,144
Total	5,710	5,345	-365***

*** All surplus credits will be retired as a condition of biocertification

Red flag variation

Using a ‘improve or maintain’ test described under the methodology is considered to be satisfied where the number of credits that are created is equal to, or exceeds the number required, provided ‘red flags’ have been avoided, or a red flag variation has been approved by the Director General of the OEH.

Biocertification process will not ensure Koala protection

If the Minister for the Environment is satisfied that an ‘improve or maintain’ outcome has been achieved, they may confer biocertification on land. If the Minister confers biocertification on land, a consent/approval authority does not have to take biodiversity issues into consideration when assessing development applications. This is to say that for the purposes of Section 5A of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act), the development or activity is not subject to an Assessment of Significance for threatened species, populations or ecological communities.

Zoning process ongoing at the same time

Lendlease have prepared a Concept Masterplan that addresses the Structure Plan and have made submissions to DPE regarding the rezoning of the land. Lendlease currently has a rezoning application and biocertification before the DPE. Without seeing this application, biocertification is difficult to assess.

Impact on red flagged area

Unfortunately, we haven't had enough time to assess this aspect of the referral properly. In spite of this, we maintain that the removal of this land is completely unnecessary.

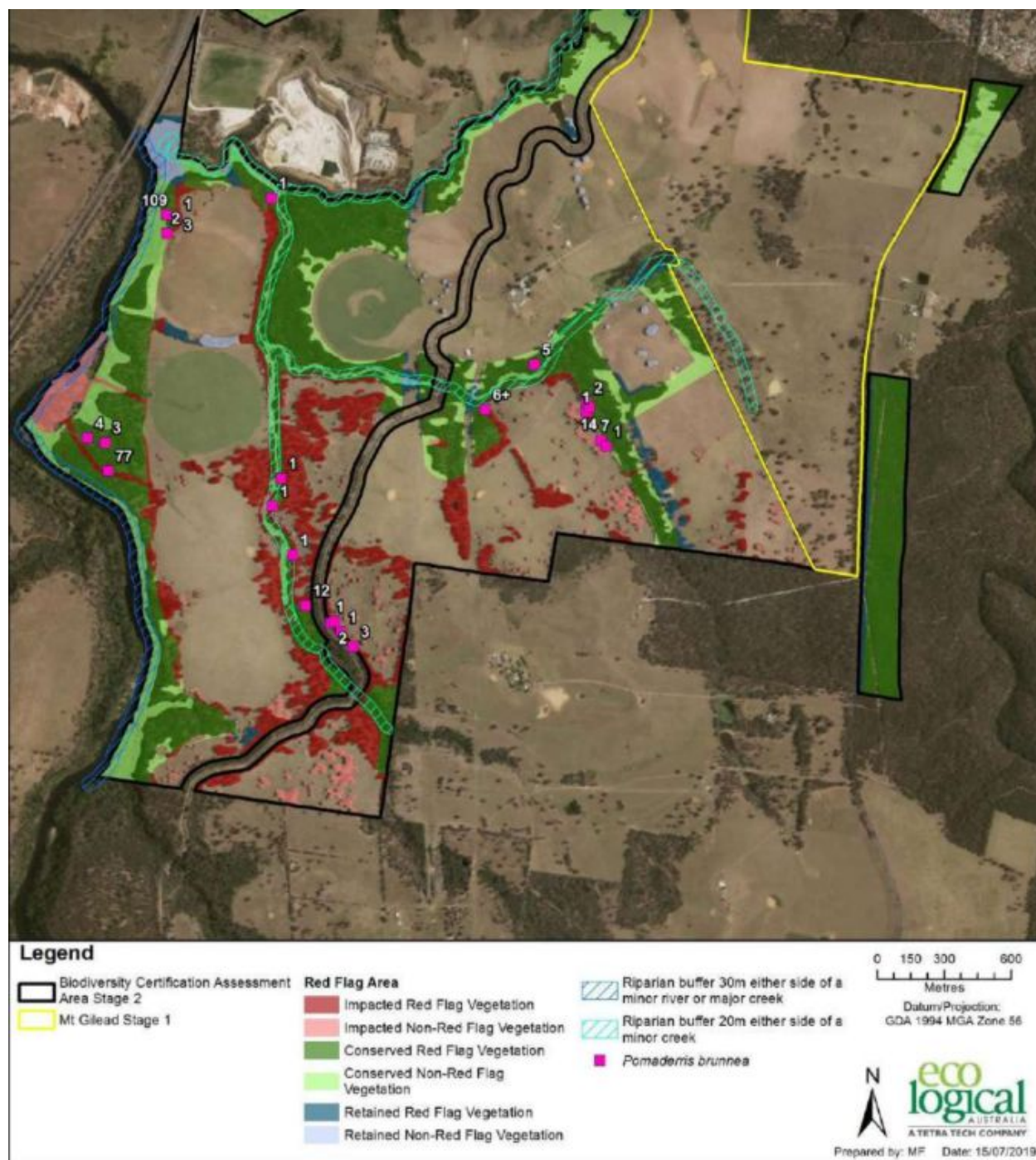


Figure 28: Impacted, conserved and retained red flag vegetation, species and areas of regional or state biodiversity conservation significance

Impacts on other species

Quite aside from the likely irreversible impacts Gilead Stage 2 will have on the local Koala population, the proposed development also poses a number of threats to other threatened species in the area.

Lendlease is directly responsible for the removal of Sydney's last Emu mob from St Mary's.¹³ Similarly, the Cumberland Land Snail (fauna), River-Flat Eucalyptus Forest (flora) and the Cumberland Plain Woodland (flora) are all endangered ecologies within the ambit of the development area. The Threatened Species Conservation Act 1995 (NSW) serves to protect these as well as other endangered species of flora, fauna and ecological communities in NSW.

Further, Lendlease is cumulatively responsible for eroding the conservation status of the Long-nosed Bandicoot from 'vulnerable' to 'endangered', through building on the vegetation curtilage between Manly and North Head.¹⁴ The population within the region is one of the few remaining populations of the species within Sydney and its environs.

Conclusion

LendLease has this historical moment, when Koalas have been decimated across Australia by bushfires, to step up as so many Australians have, and to reach out and help us secure their survival, habitat and corridors.

In seizing the moment, Gilead could be reimagined for its Koala habitat and tourist potential (noting its unique Frontier history, proximity to the new airport and one hour train trip to Sydney) as Sydney's only frontier Koala Sanctuary with a Koala hospital, Sanctuary, Frontier heritage and Ecotourism facilities, whilst creating a long-term industry with a potential turnover of hundreds of millions of dollars per year. Semenggoh Orangutan Reserve in Malaysia generates over \$25m a year (2010),¹⁵

¹³Western Sydney Conservation Alliance v Penrith City Council [2011] NSWLEC 244, <https://www.caselaw.nsw.gov.au/decision/54a6364f3004de94513d9247>.

¹⁴Lend Lease Development Pty Limited v Manly Council No. 10362 of 1996 [1996] NSWLEC 268, <http://www8.austlii.edu.au/cgi-bin/viewdoc/au/cases/nsw/NSWLEC/1996/268.html?stem=0&synonyms=0&query=title%28%221996%20NSWLEC%20268%22%29>.

¹⁵<http://www.conservationandsociety.org/article.asp?issn=0972-4923;year=2014;volume=12;issue=1;spage=27;epage=42;auiast=Zander>

and China's Panda reserves even more, and they are far from being on the doorstep of a major city and international tourist hub.

Unfortunately, Lendlease operates as a 'one tool in the tool box' type of company that uses contacts to rezone and flip land, rather than a company built on innovation and long-term investments. Asking the Campbelltown Koala Colony to pay for Lendlease's profits with their long term survival, as demanded by Stage 2, is too high a price.

As a concluding remark, we refer to the prescribed period of 10 business days the Referral for Stage 2 was made available for public comment and note this was not nearly enough time to properly examine the entirety of the documents provided with the Referral. Had an extension been granted, we would have gladly taken the opportunity to provide a fuller submission.

Regards

Saul Deane
Urban Sustainability Campaigner
Total Environment Centre.