



Our Ref: DOC19/1013642
Your Ref: SSD 9613

Team Leader, Social and other Infrastructure
Planning and Assessment Group
PO Box 39
Sydney NSW 2001

Attention: Ms Ingrid Berzins

Dear Mr Gibson

RE: UNE New Wright Building, Armidale, Environmental Impact Statement (SSD 9613)

Thank you for your referral dated 19 November 2019 about the Environmental Impact Statement proposed New Wright Block at the University of New England campus in Armidale seeking comments from the Biodiversity and Conservation Division (BCD) of the Environment, Energy and Science Group in the Department of Planning, Industry and Environment. I appreciate the opportunity to provide input.

The BCD was formerly part of the Office of Environment and Heritage, but now forms part of a Group that has responsibilities relating to biodiversity (including threatened species and ecological communities, or their habitats), Aboriginal cultural heritage, National Parks and Wildlife Service estate, climate change, sustainability, flooding, coastal and estuary matters.

We have reviewed the documentation provided and do not raise any issues about Aboriginal cultural heritage, National Parks and Wildlife Service estate, climate change, sustainability, flooding, coastal or estuary matters. We note that the consultation protocols were followed to engage Registered Aboriginal Parties (RAPs) to provide cultural knowledge of the development area and surrounds and we support the conclusions in the Aboriginal Cultural Heritage Assessment Report. However, several issues are apparent with the biodiversity assessments.

Detailed comments on both Aboriginal cultural heritage and biodiversity matters are provided in **Attachment 1**.

In conclusion the BCD recommends:

1. A condition be included requiring the retirement of the biodiversity credits as calculated in the Biodiversity Development Assessment Report. The condition should specify that credits are to be retired before any development that would impact on biodiversity values is carried out and that before such development is carried out the proponent must provide evidence to the consent/approval authority that the offset obligations have been met.
2. A condition be included requiring implementation of all the avoidance and mitigation measures set out in the Biodiversity Development Assessment Report.

3. To address the loss of connectivity for koalas and offset the losses of koala feed trees it is recommended that koala feed trees be planted in the eastern portion of the development site. Trees to be planted:
 - a. could include species that occur in the Yellow Box-Blakely's Red Gum plant community such as *Eucalyptus melliodora* (Yellow Box), *E. blakelyi* (Blakely's Red Gum) and *Eucalyptus albens* (White Box) as these will also contribute to the local biodiversity of the area.
 - b. should be semi mature specimens and be planted with suitable spacings to establish mature canopies that are not restricted by adjacent plantings. A minimum of a 3:1 replacement to loss ratio should be used to determine the replacement number of koala feed trees.

If you have any questions about this advice, please do not hesitate to contact Ms Rachel Lonie, Senior Conservation Planning Officer, at rachel.lonie@environment.nsw.gov.au or 6650 7130.

Yours sincerely

 11 December 2019

DIMITRI YOUNG
Senior Team Leader Planning, North East Branch
Biodiversity and Conservation

Enclosure: Attachment 1: Detailed BCD Comments – UNE New Wright Building, Armidale (SSD 9613)

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The Biodiversity and Conservation Division (BCD) has reviewed the Biodiversity Development Assessment Report (BDAR) prepared by Ecological Australia dated 1 November 2019 and other documents that support the State Significant Development (SSD) project.

BDAR Waiver Decision Report

The Decision Report for the BDAR waiver request stated that several biodiversity values needed to be considered in the BDAR as set out below:

- how the proposed development avoids direct and indirect impacts on vegetation;
- the importance of the site in contributing to vegetation structure, function and composition across the surrounding landscape, which includes Dumaresq Creek;
- the habitat value of the planted trees for foraging and roosting for threatened woodland birds;
- the habitat value of the planted trees for stepping-stone connectivity with Dumaresq Creek and other vegetation in the local landscape including for koala movement;
- the value of the planted trees as koala feed trees;
- whether the planted vegetation comprises White Box – Yellow Box – Blakelys' Red Gum Grassy Woodland endangered ecological community or provides habitat for any threatened ecological communities (TECs);
- potential impacts arising from vehicle strikes on threatened animals including koalas;
- the occurrences of *E. nicholli* trees in the development site and justification for why they do not need to be considered further as a threatened flora species.

Assessment of *Eucalyptus nicholii*

The BDAR states that within the development site 11 planted *Eucalyptus nicholii* will be removed as part of the development. This is different from the number identified in the Arboricultural Impact Assessment by Arborsafe dated May 2019 which identifies six will require removal. This may be the result of the refined design and the precautionary initial calculation in the BDAR.

Despite this tree being a naturally occurring species in the region and the development site forming potential habitat, the BCD considers this species may be excluded as a threatened species that requires specific consideration in the BDAR as the trees have been planted, the mid storey is absent and the trees do not form part of a functioning or semi-functioning Plant Community Type (PCT).

Koalas

The BDAR states that despite the presence of tree species that are palatable for the koala (*Phascolarctos cinereus*) the native vegetation *"is likely to be of limited value due to the isolated occurrence of these trees, and lack of records within the immediate vicinity of the investigation area. No Koala sign (scats or scratches) were observed during the site inspection."*

The BCD does not consider there is sufficient evidence to conclude that the site would be of limited value for koalas. Koalas are known to forage in isolated but suitable koala feed trees and move through the landscape to reach these trees as well as resting in non-browse trees.

As noted in the BDAR Waiver Decision Report, a koala BioNet record from 2013 does exist within the development area but this has not been acknowledged in the BDAR. There are also numerous and recent records nearby, including in the roadside plantings on Elm Avenue and along Dumaresq Creek which is situated 120-240 metres to the east, north and west of the site. Dumaresq Creek is a known local movement corridor for koalas, which have also been recorded on the main UNE campus to the creek's north.

The Arboricultural Impact Assessment (Arborsafe 2019) identifies the following koala feed trees will be removed:

- 6 x *Eucalyptus nicholii* (2714, 3811, 3812, 3813, 3815, 3819)
- 3 x *Eucalyptus melliodora* Yellow Box (2636, 3806, 3816)

We note that several other koala feed trees are proposed to be retained and protected, such as a group of 32 mature New England Peppermints (*E. nova-anglica*) that are recommended to be retained with some deadwooding, reduction pruning and further assessment. However, the impact of the removal of the nine koala feed trees and the impact on connectivity for koalas has not been adequately addressed in the BDAR.

Prescribed biodiversity impacts

The BDAR states the development does not have any prescribed biodiversity impacts and the development site does not contain any connectivity features. Prescribed impacts that are to be assessed under the Biodiversity Offset Scheme under Clause 6.1 of the *Biodiversity Conservation Regulation 2017* include the impacts of:

- development on the connectivity of different areas of habitat of threatened species that facilitates the movement of those species across their range,
- development on movement of threatened species that maintains their lifecycle,
- vehicle strikes on threatened species of animals or on animals that are part of a threatened ecological community.

While these additional prescribed biodiversity impacts are not additional biodiversity impacts for the purposes of calculating biodiversity credits to be retired, they may be taken into account in the determination of the biodiversity credits required to be retired (or other conservation measures required to be taken) under a planning approval.



Figure 1. BioNet records for koala in the vicinity of the development site, including one record within the site.

The Detailed Landscape Report by Arcadia dated August 2019 states:

"The University of New England New Wright Block Project does not increase its original foot print before the project was proposed and therefore no existing koala habitat has been affected. The project has proposed local koala feed trees of Eucalyptus tereticornis and Eucalyptus camaldulensis (See Section 2.5 Masterplan). The project where the best the most likely location is for Koala habitat would occur within the project boundaries. This will then encourage the linking of koala habitat and provide protection and food for the species."

This is not correct, as the project does increase the original footprint. However, the main issue is that the documentation does not identify where these local koala feed trees would be located, or the numbers and pot sizes to be planted. For example, the Plant Schedule in the Detailed Landscape Design does not list these species. Also, *E. camaldulensis* is not a locally occurring species.

The BCD considers that the project should include planting of replacement koala feed trees to offset the losses of koala feed trees (at least nine (9) are identified in the Arborsafe Report) as well as the reduced landscape area. The ideal location for these would be on the eastern part of the site and adjacent to the plantings along Elm Avenue.

The BCD recommends planting tree species that occur in the Yellow Box-Blakely's Red Gum plant community such as *Eucalyptus melliodora* (Yellow Box), *E. blakelyi* (Blakely's Red Gum) and *Eucalyptus albens* (White Box) that will also contribute to the local biodiversity of the area. New England peppermint *E. nova-anglica* and Forest red gum *E. tereticornis* may also be suitable and this list is not exhaustive.

Meeting the offset requirement

The BDAR identifies the impacts to native vegetation requiring offsets in Table 23. For the impact on 0.2 ha of PCT 510 the offset requirement is calculated to be two credits. The BDAR recommends the offsets be achieved through planting and maintenance of native vegetation within the UNE grounds, commensurate to the cost of providing formal ecosystem credits under the Biodiversity Offsets Payment Calculator, in lieu of formal credit retirement.

Under the Biodiversity Offset Rules established through the *Biodiversity Conservation Regulation 2017*, proponents can only meet their offset obligation by:

1. retiring credits based on the like-for-like rules, or
2. funding a biodiversity conservation action that benefits the threatened entity impacted by the development. The action must be listed in the Ancillary rules: Biodiversity conservation actions and meet the other requirements set out by these rules, or
3. committing to deliver mine site ecological rehabilitation that creates the same ecological community or threatened species habitat (available for major mining projects only). The ecological rehabilitation must meet the requirements set out in the "ancillary rules for mine site ecological rehabilitation" which will be published by the Environment Agency Head, or
4. making a payment to the Biodiversity Conservation Fund calculated using the offset payments calculator.

The proponent must demonstrate to the consent/approval authority that they were not able to obtain like-for-like credits following the Ancillary rules: Reasonable steps to seek like-for-like biodiversity credits. If a proponent can demonstrate they were unable to find like-for-like credits and chooses not to use the other offset options, they can seek approval to offset with a broader suite of biodiversity using the variation rules.

In this case the BDAR does not demonstrate that the proponent has been unable to find like-for-like credits as per option 1. Funding a biodiversity conservation action under option 2 to benefit a relevant threatened entity is not relevant as the action is not listed in the Ancillary rules. Option 3 is also not relevant. Therefore, the proponent must meet their offset obligation under either options 1 or 4.

Timing and evidence of satisfaction of offset obligations

A condition to retire biodiversity credits is required to be complied with before any development is carried out that would impact on biodiversity values. If the retirement of particular biodiversity credits applies to a stage of the development, compliance with the condition for their retirement is postponed until it is proposed to carry out that stage of the development. Before the development is carried out the proponent must provide evidence to the consent/approval authority that the offset obligations have been met.

BCD Recommendations

In conclusion the BCD recommends:

1. A condition be included requiring the retirement of the biodiversity credits as calculated in the Biodiversity Development Assessment Report. The condition should specify that credits are to be retired before any development that would impact on biodiversity values is carried out and that before such development is carried out the proponent must provide evidence to the consent/approval authority that the offset obligations have been met.
2. A condition be included requiring implementation of all the avoidance and mitigation measures set out in the BDAR.
3. To address the loss of connectivity for koalas and offset the losses of koala feed trees koala feed trees be planted in the eastern portion of the development site. Trees to be planted:
 - a. could include species that occur in the Yellow Box-Blakely's Red Gum plant community such as *Eucalyptus melliodora* (Yellow Box), *E. blakelyi* (Blakely's Red Gum) and *Eucalyptus albens* (White Box) as these will also contribute to the local biodiversity of the area.
 - b. should be semi mature specimens and be planted with suitable spacings to establish mature canopies that are not restricted by adjacent plantings. A minimum of a 3:1 replacement to loss ratio should be used to determine the replacement number of koala feed trees.

2. Aboriginal cultural heritage

The BCD has reviewed the Aboriginal Cultural Heritage Assessment Report for the Wright Block Project by Remnant Archaeology (2019). We note that the consultation protocols were followed to engage Registered Aboriginal Parties (RAPs) to provide cultural knowledge of the development area and surrounds. This involved the project archaeologist and RAPs undertaking site transects across the planned development area.

No cultural material was identified during these transects although one stone artefact was identified offsite adjacent to the edge of the development footprint and several sites occur within 1km of the project area. No cultural landscapes or intangible sites were noted by the RAPs.

The BCD notes the site area has been heavily disturbed and modified since the University of New England was established in the 1930s. The site has been used for historical farming and pastoral activities with ongoing pedestrian activities and mowing maintenance taking place.

The assessment identified that the likelihood of cultural material and cultural landscape sites (isolated artefacts, artefact scatters, campsites, modified trees, stone quarries, art, ceremonial sites, burials, and middens) was either nil or low. Following dialogue and fieldwork with the RAPs, the significance of the core values adopted from the Burra Charter (Historic values, Aesthetic values, Social-cultural values, Scientific values, Research potential, Representativeness, and Rarity) were all scored as low.

The BCD agrees with the recommendations outlined in Aboriginal Cultural Heritage Assessment Report by Remnant Archaeology as follows:

"Given the proximity of the project area to known sites of significance within 1km to the north, and to within 430m of Dumaresq Creek (including a recorded AHMIS location) to the north, monitoring of ground disturbance activity by RAP representatives is required. If, through future development planning, impacts become necessary outside the designated Wright Block development zone demarcated in this report, Aboriginal cultural heritage assessment of these areas will need to be carried out.

It is recommended a Stop Work Procedure (SWP) be installed in recognition of the potential for discovery of unexpected or incidental finds. Note that any works that may reveal or disturb cultural heritage objects or sites will require an AHIP from OEH in order for the find(s) to be mitigated (if avoidance is not an option). The SWP procedure is outlined in Table 10, adapted from (Fox 2014a; 2014b; 2014c).

Facilities Management Services (FMS) must ensure every on-site contractor/worker is provided with a copy of the SWP process and that all on-site workers are made aware if/when the SWP is brought into action.

It may be possible in some instances to isolate a cultural object/place and continue working without further disturbance. Advice from a heritage consultant or Aboriginal field officers (if present) should be sought, but a buffer of up to 5m may be required, with high-visibility barrier fencing/mesh surrounding the find location.

FMS staff and contractors be encouraged to participate in a cultural heritage induction program developed in collaboration with the local Aboriginal Community.

In conjunction with induction training developed in collaboration with the local Aboriginal Community, FMS is encouraged to include a program of cultural awareness; a program that would provide an opportunity for the explanation by Aboriginal people, of the cultural significance of the University of New England to Aboriginal people. This program would provide opportunities to strengthen relationships UNE-FMS is seeking to build."

