



Our ref: DOC21/1010877

Your ref: SSD-21854025

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Dear Vi

Environmental Impact Statement – New Wee Waa High School (SSD-21854025)

Thank you for your e-mail dated 9 November 2021 to the Biodiversity, Conservation and Science Directorate (BCS) of the Department of Planning, Industry and Environment inviting comments on the Environmental Impact Statement (EIS) for the new Wee Waa High School.

BCS understands that, pending legal advice currently being sought by Schools Infrastructure NSW (email from Tahlia Alexander, Principal Planning Officer, dated 1 December 2021), separate planning pathways are proposed to be applied to inter-related components of this project:

- Works to mitigate flooding impacts are proposed to be both assessed and determined by Schools Infrastructure NSW under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).
- The remainder of development associated with the new high school is being assessed as State Significant Development (SSD) under Part 4 of the EP&A Act.

From the information presented in the EIS and appendices it appears there is some overlap between the footprint of the flood mitigation works proposed for assessment under Part 5 and the development footprint currently being assessed as SSD under Part 4.

The current Biodiversity Development Assessment Report (BDAR) has been prepared on the assumption that biodiversity impacts within the portion of the SSD footprint overlapping the flood mitigation works will have already been assessed via Part 5. Similarly, the assessment of flooding impacts supplied with the EIS is based on the implementation of the flood mitigation works activity. However, it is BCS's understanding that the Part 5 assessment remains in progress and is not available at this time.

BCS will be unable to confirm whether the current coverage of the BDAR is acceptable or provide comments on flooding-related impacts until:

- a) Social and Infrastructure Assessments has confirmed whether the dual EP&A Act pathway assessment approach will be accepted for this project
and (if the dual EP&A Act assessment pathway is to be applied)
- b) a copy of the Part 5 impact assessment for the flood mitigation works is supplied.

At this stage BCS has undertaken a preliminary review of the BDAR submitted with the EIS. Some interim biodiversity recommendations for the current BDAR are provided in **Attachment A**, supported by detailed comments in **Attachment B**.

Following confirmation of the assessment approach and supply of any additional impact assessment as necessary, BCS may provide further comments and recommendations related to the assessment of both biodiversity and flooding impacts.

If you require any further information regarding this matter, please contact Erica Baigent, Conservation Planning Officer, via erica.baigent@environment.nsw.gov.au or (02) 6883 5311.

Yours sincerely

A handwritten signature in black ink that reads "Samantha Wynn". The signature is written in a cursive, flowing style.

Samantha Wynn
Senior Team Leader Planning North West
Biodiversity, Conservation and Science Directorate

7 December 2021

Attachment A – BCS's Recommendations

Attachment B – BCS's Detailed Comments

BCS's recommendations

New Wee Waa High School – Biodiversity Development Assessment Report (version dated 5 November 2021)

- 1.1 Clarify whether the total area of vegetation zone 'PCT 40 Moderate' is 0.81 hectares or 0.94 hectares and update the Biodiversity Development Assessment Report (BDAR) as necessary.
- 2.1 Ensure the correct plot data is entered into the Biodiversity Assessment Method Calculator (BAM-C).
- 3.1 Provide adequate justification for the exclusion of the bush stone-curlew and shrub sida from consideration across the entirety of the development site (in accordance with the Biodiversity Assessment Method (BAM) subsection 5.2.3 (step 3) and the guidance provided in the BAM Operational Manual – Stage 1).

Otherwise, the BAM requires the assessor to survey for these species, provide an expert report or assume presence.
- 3.2 In the case of the shrub sida, the assessor could consider whether they are able to make an adequate case that the targeted flora survey undertaken on the site in September 2021 would have been suitable to detect this species despite it not being included as a target species. This would require at a minimum:
 - a) Demonstration that all native flora species encountered on survey transects were recorded, or
 - b) Verification that the ecologist conducting the survey would have noted, and been able to identify this species, despite it not being considered a target species at that time.
- 4.1 Justify the attribute values used to calculate the future vegetation integrity score for management zone 2b, including:
 - a) details of the management regime proposed. At a minimum this should include:
 - i. frequency and timing of slashing
 - ii. clarification of the method to be employed to reduce existing canopy cover to 15% (tree removal or tree lopping)
 - iii. area of clearing associated with proposed infrastructure within the zone
 - iv. intentions regarding fallen timber within the management zone
 - v. proposed weed control targets.
 - b) Evidence-based assessment of likely response of the flora species present (and threatened flora species assumed present) to the proposed management regime.
- 5.1 Reference the results of the Flood Impact Assessment and Storm Water Management Plan in addressing prescribed impacts in accordance with BAM subsection 8.3.4.
- 6.1 Address apparent inconsistencies between the *Biodiversity Conservation Act 2016* and *Environment Protection and Biodiversity Conservation Act 1999* conclusions regarding habitat suitability for the winged peppercreep.
- 7.1 Revise the mitigation measures presented in Table 23 of the BDAR to address the specific points raised by BCS under Issue 6.

BCS's detailed comments

New Wee Waa High School – Biodiversity Development Assessment Report (version dated 5 November 2021)

BAM	Biodiversity Assessment Method
BAM-C	Biodiversity Assessment Method Calculator
BC Act	<i>Biodiversity Conservation Act 2016</i>
BDAR	Biodiversity Development Assessment Report
EPBC Act	<i>Environmental Protection and Biodiversity Conservation Act 1999</i>
PCT	Plant Community Type
TBDC	Threatened Biodiversity Data Collection
SSD	State Significant Development
VI score	Vegetation Integrity Score

The following preliminary comments on the current BDAR are provided pending confirmation of the assessment approach to be applied to the proposed flood mitigation works which overlap the development footprint being assessed in the SSD application.

1. The area of the vegetation zones in the BDAR and BAM-C conflicts with the shapefiles provided

The total area of impact assessed in the BDAR and BAM-C is 1.46 hectares.

Table 5 of the BDAR reports the following vegetation zone areas:

- 'PCT 40 No Canopy' - 0.94 hectares
- 'PCT 40 Moderate' - 0.52 hectares

The area figures appear to have been reversed for these zones, in comparison to other tables in the BDAR and the BAM-C data entries.

In Table 21 (BDAR page 36) the 0.94 hectare 'PCT 40 Moderate' is broken down into two management zones for calculating the future vegetation integrity score:

- 2a 'PCT 40 Moderate' (to be cleared) - 0.81 hectares
- 2b 'PCT 40 Moderate' (to be managed) - 0.13 hectares.

The data entered into the BAM-C is consistent with Table 21.

However, the shapefile provided by EcoLogical Australia ('PCTs_for Offsetmap.shp') indicates that the entire vegetation zone 'PCT 40 Moderate' is 0.81 hectares, not 0.94 hectares. The shapefiles depict the 0.13 hectare management zone '2b PCT 40 Moderate to be managed' as being within the 0.81 hectare area, rather than additional to it.

Recommendation

- 1.1. Clarify whether the total area of vegetation zone 'PCT 40 Moderate' is 0.81 hectares or 0.94 hectares and update the BDAR as necessary.

2. There are some inconsistencies between plot data sheets and BAM-C entries

Plot data sheets have been provided in electronic format. Data for six BAM plots is supplied, with only two of those plots located within the development site.

Plots entered into the BAM-C are called 'Plot 1' and Plot 2'. The data entered does not completely match that shown within the plot data sheets and shapefiles for Plots 1 and 2. It appears that the locations of Plot 1 and Plot 2 may have been accidentally switched when entering the data into the BAM-C, and some data may also have been incorrectly entered.

Plot 1 (vegetation zone 'PCT 40 Moderate')

- The easting and northing entered into the BAM-C for Plot 1:
 - does not match the data sheet for that plot, nor the location of Plot 1 in the shapefile provided.
 - very closely aligns with the easting and northing in the data sheet labelled Plot 6 (a plot number which does not appear in the shapefile) and the location of Plot 2 in the shapefile.
- The data sheet for Plot 1 indicates tree stem classes of up to the 30-49 centimetre class were present. The corresponding entry in the BAM-C only indicates presence of stem size classes up to the 20-29 centimetre class.

Plot 2 (vegetation zone PCT 40 Open Canopy')

- The easting and northing entered into the BAM-C for Plot 2:
 - is not recorded on the data sheet labelled Plot 2
 - closely aligns with both the location of Plot 1 in the shapefile and the datasheet labelled Plot 1.
- The data entered into the BAM-C for Plot 2 does not match the data sheet labelled Plot 2. Instead the data entered into the BAM-C for Plot 2 appears to match the data sheet labelled Plot 6.

Recommendation

- 2.1 Ensure the correct plot data is entered into the BAM-C.

3. Exclusion of the bush stone-curlew and shrub sida from consideration as species credit species requires further justification

Conclusions regarding which candidate species credit species require further assessment are presented in Table 11 of the BDAR (from page 23).

When assessing which candidate species credit species may be excluded from further consideration, BAM subsection 5.2.3 (Step 3) stipulates that the BDAR must include:

- a description of microhabitats required by the species, supported by evidence such as published literature.
- details of the field assessment conducted to determine if habitat constraints or known microhabitat(s) are absent, or if present, whether it is degraded to the point that the species is unlikely to use the subject area.

Describing a vegetation zone as degraded or low/poor condition is not adequate justification to remove a candidate species credit species from the generated list. Evidence must support all conclusions.

Species credit species excluded based on habitat constraints (as listed in the TBDC) being absent or degraded

Justification for excluding the bush stone-curlew (*Burhinus grallarius*) from further assessment is currently inadequate.

Fallen/standing dead timber, including logs, is identified in the TBDC as a habitat constraint for the bush stone-curlew. The BDAR indicates that fallen timber was recorded on the site, but states that the amount of fallen timber present is not adequate for this species.

BCS advises that this species may persist in such town spaces with minimal fallen timber. Additional justification based on site specific factors and threats present, supported by published literature, would be required to exclude this species under BAM subsection 5.2.3.

Species credit species excluded based on known microhabitats being absent or degraded

When excluding three fauna and two flora species credit species based on microhabitats being absent, or degraded to the point where the species is unlikely to use the site, the BDAR:

- does not include a sufficient description of microhabitats required by the subject species, supported by published literature. In most cases, partial information from the DPIE website only is quoted as justification for exclusion of these species. This approach is inadequate.
- does not clearly relate the results of field assessment to conclusions on the presence (and level of degradation) or absence of the microhabitats required by these species.

The five candidate species credit species excluded based on the above factors have been discussed with the relevant BCS Ecosystems and Threatened Species staff. BCS agrees with the exclusion of four of those species, albeit for alternative reasons to those presented in the BDAR in most cases. However, justification for excluding shrub sida (*Sida rohlenae*) from further assessment remains inadequate.

The BDAR excluded shrub sida from further consideration because *'This species grows on flood-out areas, creek banks and at the base of rocky hills, which are not a habitat feature of the subject land'*.

The BDAR indicates that the site has cracking clay soils. The BDAR does not recognise that shrub sida has been recorded on grey clay. Based on the information presented in the BDAR, together with aerial images of the site, BCS considers the south eastern portion of the development site within the zone 'PCT 40 Moderate' to be potential habitat for this species.

Recommendations

- 3.1 Provide adequate justification for the exclusion of the bush stone-curlew and shrub sida from consideration across the entirety of the development site (in accordance with BAM subsection 5.2.3 (step 3) and the guidance provided in the BAM Operational Manual – Stage 1).

Otherwise, the BAM requires the assessor to survey for these species, provide an expert report or assume presence.

- 3.2 In the case of the shrub sida, the assessor could consider whether they are able to make an adequate case that the targeted flora survey undertaken on the site in September 2021 would have been suitable to detect this species despite it not being included as a target species. This would require at a minimum:
- a) Demonstration that all native flora species encountered on survey transects were recorded, or
 - b) Verification that the ecologist conducting the survey would have noted, and been able to identify this species, despite it not being considered a target species at that time.

4. The BDAR should set out the rationale for the future vegetation integrity score calculated for the 'managed' portion of the zone 'PCT 40 Moderate'

A 0.13ha portion of vegetation zone 'PCT 40 Moderate' (Management zone 2b) at the high school entrance is proposed to be managed part of ongoing school ground maintenance.

Various general statements regarding the nature of this management are made in Tables 16, 17 and 20 of the BDAR, including references to slashing 'periodically', clearing for 'essential infrastructure' related to drainage, reduction of canopy cover from 22 to 15% and removal of high threat weeds.

Table 22 also notes potential indirect impacts to the 2B management zone including:

- increased edge effects and additional threats to threatened flora species assumed present.
- Collection of timber from 'within retained vegetation' during both construction and operational phases.

The landscape plan appears to indicate that an entrance path will bisect this management zone, which does not align with the footprint presented in the BDAR.

In circumstances where partial clearing of vegetation is proposed and remaining vegetation will be maintained, the assessor may determine that the future value of the relevant vegetation integrity (VI) attributes are greater than zero.

Assessors are expected to provide a clear outline of the ongoing management to be undertaken to maintain the expected future VI score where only partial impact to native vegetation is proposed. Partial clearing scores must be justified and reflect any likely degradation from changed land use patterns and/or future management proposed.

The BDAR does not provide adequate justification for the partial impact values entered into the BAM-C (and presented in Table 20) for the 2B management zone. The actual management regime to be applied to the site is not presented, nor related to specific flora species and PCT 40. The impacts of ongoing management on vegetation are likely to vary with the frequency and timing of slashing and the level of weed control proposed.

Further justification and evidence is required to support the assessors assumptions.

Recommendations

- 4.1 Justify the attribute values used to calculate the future vegetation integrity score for management zone 2b, including:
 - a) details of the management regime proposed. At a minimum this should include:
 - i. objectives of the managed area
 - ii. frequency and timing of slashing
 - iii. clarification of the method to be employed to reduce existing canopy cover to 15% (tree removal or tree lopping)
 - iv. area of clearing associated with proposed infrastructure within the zone
 - v. intentions regarding fallen timber within the management zone
 - vi. proposed weed control targets.
 - b) Evidence-based assessment of likely response of the flora species present (and threatened flora species assumed present) to the proposed management regime.

5. The BDAR does not address all potential prescribed impacts

Subsection 8.3.4 of the BAM requires the BDAR to assess the impacts of the proposal on water quality, water bodies and hydrological processes that sustain threatened entities. In response to this prescribed impact the BDAR only states *'there are no water bodies in the subject land'*. The BDAR does not utilise the relevant site-specific studies accompanying the EIS to specifically address water quality or changes to hydrological processes as potential prescribed impacts.

Recommendation

- 5.1 Reference the results of the Flood Impact Assessment and Storm Water Management Plan in addressing prescribed impacts in accordance with BAM subsection 8.3.4.

6. There is some inconsistency in the assessment of the threatened species under the BC Act versus the EPBC Act.

In Table 11 (page 25) the BDAR concludes that the habitat on the site is suitable for the winged peppercress (*Lepidium monoplacoides*). In contrast, Table E2 (Appendix F 'EPBC Act Likelihood of Occurrence') concludes that impact assessment under the EPBC Act is not required as *'the species has not been recorded within the locality and the subject site is considered too degraded to present habitat for this species'*.

Recommendation

- 6.1 Address apparent inconsistencies between the BC Act and EPBC Act conclusions regarding habitat suitability for the winged peppercress.

7. Some revisions to the proposed mitigation measures are recommended.

Proposed mitigation measures are presented in Table 23 of the BDAR:

- The marking out of vegetation to be retained to protect it from inadvertent damage during construction works is not included as a mitigation measure. Yet risk of inadvertent clearing and trampling are identified as indirect impacts in Table 22.
- There are typographical errors in the 'timing' and 'responsibility' columns for the measure *'Noise barriers or daily /seasonal timing of construction and operational activities to reduce impacts of noise'*.
- The mitigation measures are not clear on whether seasonal construction limitations related to fauna will be implemented, nor what action might be taken if nesting activity is discovered during construction.
- For the measure *'Making provision for the ecological restoration, rehabilitation and/or ongoing maintenance of retained native vegetation habitat on or adjacent to the development site'* the action is *'the retained vegetation would be managed as part of the broader school grounds maintenance. Weeds should be managed and controlled within the adjacent vegetation to be retained'*. The proposed management regime should be outlined (see recommendation 4.1), with a commitment to preparing a management plan for the retained native vegetation.

Recommendation

- 7.1 Revise the mitigation measures presented in Table 23 of the BDAR to address the specific points raised by BCS under Issue 7.