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Senders ref: SSD-8804

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Department of Planning, Industry & Environment
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Via email: joel.herbert@planning.nsw.gov.au

22 May 2020

Dear Mr Herbert

Subject: Howlong Sand and Gravel Quarry Expansion (SSD 8804) - Review of Environmental Impact Statement

Thank you for the notification dated 23 April 2020 regarding the Howlong Sand and Gravel Quarry Expansion in Federation Local Government Area, seeking comments from the Biodiversity and Conservation Division of the Department of Planning, Industry and Environment (the Department).

The Biodiversity and Conservation Division (BCD) has statutory responsibilities relating to biodiversity (including threatened species, populations, ecological communities, or their habitats), Aboriginal cultural heritage and flooding.

We have reviewed the exhibited EIS against the Secretary's Environmental Assessment Requirements (SEARs) provided by the then Department of Planning and Environment to the proponent on 7 November 2017.

BCD considers that the EIS **does not** meet the Secretary's requirements for flooding. The applicant must address issue 1 in **Attachment A**.

BCD considers that the EIS **does not** meet the Secretary's requirements for Aboriginal cultural heritage assessment (ACH). The applicant must address issue 2 in **Attachment A**.

BCD considers that the EIS, including the Biodiversity Development Assessment Report (BDAR), **does not** meet the Secretary's requirements for biodiversity. The applicant must address issue 3 in **Attachment A**.

A summary of our assessment and advice is provided in **Attachment A**. Detailed comments are in **Attachment B**. Due to amount of work required for the applicant to meet the SEARs we are unable to provide recommended conditions of approval at this time.

All plans required as a Condition of Approval that relate to flooding, ACH or biodiversity should be developed in consultation and to the satisfaction of BCD to ensure that issues identified in this submission are adequately addressed.

If you have any questions about this advice, please contact Marcus Wright, Senior Conservation Planning Officer, via rog.southwest@environment.nsw.gov.au or 02 6983 4917.

Yours sincerely



Andrew Fisher

Senior Team Leader Planning

South West Branch

Biodiversity and Conservation Division

Department of Planning, Industry and Environment

ATTACHMENT A – BCD assessment summary for Howlong Sand and Gravel Quarry Expansion (SSD 8804) - Review of Environmental Impact Statement

ATTACHMENT B – Detailed comments for Howlong Sand and Gravel Quarry Expansion (SSD 8804) - Review of Environmental Impact Statement

ATTACHMENT A BCD assessment summary for Howlong Sand and Gravel Quarry Expansion (SSD 8804) - Review of Environmental Impact Statement

Key Issues

1.	<i>Issue</i>	<p>Based on the current assessment, it is not possible to determine the degree of flood impact on upstream receptors (primarily levels of afflux but also flow, velocity and hazard) and whether this impact will be detrimental.</p> <p>Recommended action:</p> <p>A more detailed and targeted impact assessment is required to effectively determine the level of flood impact on upstream properties, assets and infrastructure caused by the proposed levee development</p>
	<i>Extent and Timing</i>	Pre-determination

2.	<i>Issue</i>	<p>The EIS and due diligence report do not demonstrate that the proponent has complied with the Aboriginal cultural heritage requirements for consultation or archaeological assessment stated in the SEARs, consistent with requirements under the <i>National Parks and Wildlife Act 1974</i>.</p> <p>Recommended action:</p> <p>The proponent is required to conduct an assessment in accordance with the:</p> <ul style="list-style-type: none"> - Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales - Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW - Aboriginal cultural heritage consultation requirements for proponents 2010.
	<i>Extent and Timing</i>	Pre-determination

3.	<i>Issue</i>	<p>A 1.1ha patch of native vegetation to be cleared has not been included in the credit calculations. No clearing for ancillary infrastructure has been included in the assessment.</p> <p>Recommended actions:</p> <p>The applicant is to:</p> <ul style="list-style-type: none"> - Correctly apply the BAM to determine the vegetation integrity of the 1.1ha patch to be cleared by establishing plots in that patch. This is to include a statement of the homogeneity of this patch, including the trees, and determine vegetation zones consistent with the BAM. - Apply Stages 1 and 2 of the BAM to the vegetation zones in the 1.1ha patch to be cleared (as indicated by Figure 16 of the BDAR), excluding any patches where the vegetation is found to be not native.
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		<ul style="list-style-type: none"> - Provide a revised BOS credit calculation to include the clearing of the 1.1ha patch. - Include all clearing associated with ancillary activities including road widening, fencing and levees in the BDAR, including any new vegetation zones where that work is anticipated outside of the 1.1ha patch - Provide data consistent with Appendix 10 (Table 25 and 26) including shape files and plot data. - Finalise and submit the BOS calculator related to this proposal.
	<i>Extent and Timing</i>	Pre-determination

Biodiversity and Conservation Division Advice

1.1 Is the 'baseline' for impact assessment reasonable? No

A more detailed and targeted impact assessment is required to effectively determine the level of impact of flood on upstream properties, assets and infrastructure caused by the proposed levee.

The ACH requirements for consultation or archaeological assessment have not been followed.

The biodiversity assessment has not applied the BAM correctly.

1.2 Are predictions of impact robust (and conservative) with suitable sensitivity testing? No

Further assessment of flood impacts is necessary.

The ACH assessment needs to be in accordance guidance mandated in the SEARs.

The biodiversity assessment needs to reapply the BAM.

1.3 Has the assessment considered how to avoid and minimise impacts? No

Flooding impacts will be better understood following enhanced assessment.

The assessment provided is insufficient to adequately determine impacts to ACH.

Clearing of native vegetation has been avoided and minimised.

1.4 Does the proposal include all reasonably feasible mitigation options? No

Mitigation of flood impacts will be better understood following enhanced assessment.

Mitigation of ACH impacts will be able to be considered once an adequate assessment has been completed.

Measures to mitigate the impacts on biodiversity on site have been presented and are appropriate. The BOS credit obligation is mandatory because the proposal is SSD, but it has not been derived consistent with the BAM and is not considered an appropriate mitigation measure.

2. Is the assessed impact acceptable within BCD's policy context? No

The EIS and due diligence report do not demonstrate that the proponent has undertaken or complied with the SEARs for ACH.

The impact of flooding needs to be better understood by undertaking the recommended further investigations.

The proposal is not likely to harm threatened species or their habitats.

3. Confirmation of statements of fact

The EIS and accompanying reports are considered factual.

4. Elements of the project design that could be improved

Nil.

ATTACHMENT B Detailed comments for Howlong Sand and Gravel Quarry Expansion (SSD 8804) - Review of Environmental Impact Statement

Flooding

The EIS does not address the Secretary's requirements for flooding

The primary objective of the NSW Government's Flood Prone Land Policy is to reduce the impact of flooding and flood liability on individual owners and occupiers, and to reduce the private and public losses resulting from flooding, utilising ecologically positive methods wherever possible.

To be consistent with the Flood Prone Land Policy, the EIS needs to make allowances for the assessment of the impacts of flooding on the development and the impact of the development on flood behaviour including any impacts on any other developments and lands.

Impacts on surrounding local landholders and key infrastructure is a key concern, with the existence of both local residences and major roads/bridges within (or close to) the flood impact zone in both NSW and Victoria.

We consider the hydraulic model developed to be robust and fit for purpose for producing design flood estimates, and that it has been developed with assessment of flood mitigation works such as the levee construction as an objective.

Although the impacts of the proposed levee developments around the extraction pits have been assessed on a global scale with adverse affluxes of up to 0.3m expected immediately upstream of the development in the 1% Annual Exceedance Probability (AEP) flood, the effect on the various properties, assets and infrastructure within this impacted zone have not been specifically assessed. We note that the impacts extend some four kilometres upstream.

With this level of assessment, it is not possible to determine the degree of impact on these upstream receptors (primarily levels of afflux but also flow, velocity and hazard) and whether the impact is in fact prejudicial.

The SEARs (13a) specifically required the determination and assessment of any detrimental increases in the potential flood effect on properties, assets and infrastructure. We do not consider that has been successfully completed in this case.

This more detailed assessment would allow for the determination of whether the proposed 1% AEP levee system would result in affluxes that would be prejudicial to these upstream properties, assets and infrastructure. It would also allow for the assessment of impacts on any flood evacuation routes to be determined.

Recommended Action:

A more detailed and targeted impact assessment is required to effectively determine the level of flood impact on upstream properties, assets and infrastructure caused by the proposed levee development.

Aboriginal cultural heritage

The EIS does not address the Secretary's requirements for Aboriginal cultural heritage

We note that a comprehensive due diligence report (Part 9a Aboriginal and Historic Due Diligence Assessment for the Howlong Sand and Gravel Expansion Project) inclusive of a visual inspection has been undertaken. However, this is not consistent with SEARs issued by the Department for this proposal and is not adequate for a State Significant Development (SSD). The proponent is required to conduct an assessment in accordance with:

- Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales

- Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW
- Aboriginal cultural heritage consultation requirements for proponents 2010.

The EIS and due diligence report do not demonstrate that the proponent has undertaken or complied with the requirements for consultation or archaeological assessment processes identified in the SEARs, consistent with requirements under the *National Parks and Wildlife Act 1974*.

Consultation

The information provided in relation to ACH fails to demonstrate that the key stages of consultation with Aboriginal peoples were conducted in accordance with the requirements. The key stages are:

1. Notification and determining Registered Aboriginal Parties.
2. Presentation of information about the proposed project.
3. Presentation of the method for the assessment and determining if there is cultural knowledge regarding Aboriginal objects and places of significance.
4. Reviewing the report.

In accordance with Stage 1 (notification and registration) the proponent must obtain lists of Aboriginal people with interest in the proposed project area including writing to the relevant DPIE regional office and placing a notice in local newspapers detailing the project, the purpose of the consultation and invitation to register an interest. The proponent is required to contact and notify those people, whose names were provided, of the project and the opportunity to be involved in the consultation process allowing 14 days (minimum) after this letter was sent, or advertisement published, to register an interest. A complete record/copy of the notifications (including correspondence related to Registered Aboriginal Parties) and newspaper notices must be provided in an archaeological report consistent with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (Code of Practice).

According to the EIS relevant stakeholders from the Aboriginal community were identified using a process described as being '*generally consistent*' with the Department's consultation requirements (3.3 Aboriginal Stakeholder Consultation). Based on our review of the activities undertaken, there is insufficient evidence that consultation was in accordance, or consistent, with the Code of Practice.

The EIS and due diligence report indicates that Stage 1 (Notification of Project Proposal and Registration of Interest) letters were sent 24 May 2018 to various Departments. However, the due diligence report only provides a copy of the letter sent to the Office of the Registrar for a list of Aboriginal owners. The response from the Registrar states the letter was 28 May 2018, which is inconsistent with what is stated in the due diligence. Copies of all letters, responses and advertisements need to be presented. A single response letter from one of the numerous prescribed organisations is not sufficient.

The due diligence report (6.9 Cultural Heritage) then identifies that Sam Kirby of the Albury & District Local Aboriginal Land Council (A&DLALC) registered an interest on 19 April 2018. This predates the Stage 1 Notification of 24 May 2018.

Stage 2 (Presentation of Information about the proposed project) of the consultation process aims to provide Registered Aboriginal Parties (RAPs) with information about the scope of the proposed project and the proposed cultural heritage assessment process. According to the information provided this was done through fieldwork undertaken on 9 February 2018 by archaeologist Tim Stone, with the assistance of A&DLALC CEO Sam Kirby and member Troy McGrath. We note that this date significantly predates the Stage 1 Notification (24 May 2018) and the registered interest by Sam Kirby on 19 April 2018. It should also be underscored that the presentation of project method is required to occur prior to field assessments.

The proponent must also provide a copy of the proposed project information presented to RAPs in the archaeological report. Additionally, the proponent is required to provide a copy of the notification and record of the RAPs to the Department within 28 days of the closing date for registering an interest. No record of this is provided and it has not been verified in the due diligence report or EIS.

Stage 3 of the consultation requirements establish that the proponent is to gather information about cultural significance and provide the proposed methodology for the cultural heritage assessment to the RAPs. This must allow a minimum 28 days for RAPs to review and provide feedback. According to the EIS *'this information was gathered during the archaeological field survey'* that was undertaken 9 February 2018. This predates Stage 1 and Stage 2 and did not provide RAPs the required 28 days for review and to provide feedback.

According to the consultation requirements, all feedback received in Stage 3 from RAPs must be documented in the final archaeological report. No records/copies of those interactions have been provided.

Stage 4 (Review of draft cultural heritage assessment report) requires the proponent to prepare a draft heritage assessment report and provide it to RAPs, allowing 28 days for review and comment. According to the information provided, the RAPs were invited to comment on the draft report on 23 March 2018, which again predates the Stage 1 notifications and RAP registrations.

The information as it relates to the consultation process for the proposed activity is inadequate and does not demonstrate that the identification of, and consultation with, RAP's was undertaken in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* as is required by the *National Parks and Wildlife Regulation 2019*.

The Department considers that proper consultation with Aboriginal people is a fundamental component of the ACH assessment process and must be undertaken in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, which clearly sets out the requirements for consulting with Aboriginal people. All parties are expected to comply with and progress through the identified consultation stages in a sequential and efficient manner to ensure the successful achievement of the intended outcomes.

The proponent must provide evidence to the Department of consultation consistent with the formal consultation requirements, including providing an accurate record of all consultation findings in the final archaeological report. It is as standard requirement for evidence to be provided through a consultation log, in addition to copies of correspondence to and from relevant stakeholder groups.

Archaeological Survey and Report

The SEARs required that the proponent must undertake an assessment in accordance with the Code of Practice. The due diligence report provided is not consistent with that requirement, nor is it appropriate for SSD.

The proponent is required to provide current AHIMS search results in the final archaeological report. However only results from an AHIMS search conducted in January 2018 are provided. AHIMS searches remain valid for a period no greater than 12 months and where previous investigation includes an AHIMS search which is older than 12 months, the proponent must provide a current AHIMS search.

Despite the detail provided, the shortcomings of the due diligence report are extensive and it does not meet the requirements of the Code of Practice. Requirements 1 – 10 and the specifications for an archaeological report (Requirement 11) are particularly lacking. Following is a list of key areas that need for a more appropriate assessment to be undertaken to be consistent with the Code of Practice:

Requirement 1

- describe the range and nature of sites and features within and near subject area - presented in table form with summary of site numbers and features present
- describe existing predictive models relevant to project site and subject area
- use that information to generate and provide a map in the archaeological report.

Requirement 2

The landscape context has not been reviewed to assist in the determination or prediction of:

- potential for landscape over time to have accumulated and preserved objects

- ways used landscape in the past
- likely distribution of material traces.

The landscape description must also:

- describe landscape history at a scale that allows subject area to be characterised into meaningful components or units for arch investigation
- determine if objects are likely to be concealed below the ground surface or revealed by erosional processes
- identify forms of erosion within the archaeologically surveyed area
- describe and if relevant map natural resources and natural features that would have influenced use of that landscape in the past.

The landscape description is undertaken during both the background phase and fieldwork phase of any archaeological investigation and must be explicitly referenced in the predictive model regarding potential for material traces to accumulate, be preserved and observed and documented as set out in Requirement 11.

The due diligence report and EIS fail to present a summary of information collected through Requirements 1 and 2, discuss the main issues, or describe the regional character of Aboriginal land use and material traces that it has produced in accordance with Requirement 4.

The information supplied does not present a model or series of testable statements about the nature and distribution of evidence of Aboriginal land use in the subject area based on information collected through Requirements 1 to 3 inclusive.

Requirement 4(a) states the predictive model must:

- integrate distribution of known sites using landscape description derived from Requirement 2
- characterise patterning of material traces from known social and behavioural characteristics evidenced in the ethnohistorical review
- consider distribution of natural resources (including stone raw materials, ecological communities, water availability inclusive of relict and micro water features that only function after flood or wet periods) and other probable land use strategies employed by Aboriginal people in the specific landscape context
- consider temporal and spatial relationships of sites
- identify what sorts of material traces are predicted to be present and in what densities
- make inferences about past Aboriginal occupation of the landscape based on collected evidence presented.

Requirement 4(b) requires the predictive model to be included in the archaeological report and make statements of archaeological potential. This has also not been addressed by the proponent.

The proponent does not demonstrate that the approach and method chosen for the archaeological survey has used the information obtained from Requirements 1 to 4 inclusive to ensure that the type of archaeological survey can logically be expected to yield the information necessary to meet the archaeological objectives stated as set out by the Code of Practice.

The EIS and due diligence assessment report provides no detail or otherwise in relation to areas where it can be inferred that, although not visible, material traces may occur beneath the ground surface.

According to the Code of Practice, the archaeological survey must not begin until a sampling strategy has been developed that:

- includes all landforms potentially impacted and where there's more than one of same or similar landform each landform must be sampled
- determines landforms deemed to have archaeological potential clearly describing and justifying reasons for their selection (Requirement 4)
- describe how sampling relates to proposed impact footprint

- clearly state when full coverage will be undertaken and justify when it is not.

The sampling strategy must be clearly documented in the archaeological report as set out in Requirement 11.

Requirement 5b requires that archaeological survey must:

- be conducted on foot and in accordance with the sampling strategy
- be carried out using accurately defined and named survey units
- include representative photos of survey units and landforms
- record landform and general soil info for each survey unit
- record land surface and veg conditions encountered during survey and how these impact visibility of objects
- be used to calculate survey effectiveness.

Requirements 8-10 provides what survey information needs to be included in the report, and how it is to be presented. The current report does not adequately address these requirements.

Requirement 11 stipulates that an assessment of significance is needed on objects located within the study area. The guide also requires this and provides how an assessment of significance may be undertaken. One site was located within the study area; however, the due diligence states no assessment of significance was undertaken as it will not be impacted. This is not a reason to not undertake a mandatory assessment of significance.

Requirement 11 also states that as part of the report there needs to be an impact assessment. This is to address considerations of Principles of Ecologically Sustainable Development. In this case as the object will not be harmed, it would be the precautionary and conservation principle; however, this is not recognised as no impact assessment was undertaken as required on either the object itself (Howlong 1) or landforms likely to contain ACH (the sand body to be mined).

We note that the assessment undertaken has not observed these survey requirements and that some parts of the field survey were not pedestrian but conducted in a vehicle (9.2 Survey Methods). No detail relating to the extent of vehicle survey coverage has been provided. According to the Code of Practice vehicle surveys/traverses are only considered reconnaissance and not suitable for effective survey. Any areas surveyed from a vehicle must be re-assessed on foot in accordance with the sampling strategy.

Given the nature of the proposed activity (sand extraction) and the landscape setting (natural watercourses and sand deposits), the Department identified and provided project specific requirements for ACH in addition to our standard SEARs. This included surface survey to be undertaken by a qualified archaeologist in areas with potential for the occurrence of subsurface deposits and to inform the need for targeted test excavation. Subsurface testing for sandmining in the region is a standard and expected assessment method, and should be conducted under the Code of Practice (Requirements 14-17). We note that the EIS and due diligence report do not demonstrate any consideration for this requirement, despite the proposed disturbance of sand bodies which are suspected to contain large shell middens, artefact scatters and burials.

The proponent is required to address this requirement and provide the results of the assessment in the archaeological report. The results of test excavation may inform priority areas for conservation, inform management options and identify areas of development constraint.

It is not evident from the report if the Aboriginal object recorded during the due diligence assessment (Howlong 1) has been registered on AHIMS. No site number is provided, and there is no site card attached to the appendix of the report.

Previous archaeological assessments (section 6, pages 12-14) does not refer to any recent studies. Most are from the 1970s-1990s, with just a single reference to a 2003 study by Stone and Cupper at Kow Swamp in Victoria. While it is legitimate to cite older references, the desktop assessment critically must include the most up-to-date recent studies available. These can be accessed through AHIMS.

Biodiversity

The EIS, relying on the Biodiversity Development Assessment Report (BDAR), does not meet the Secretary's requirements for biodiversity.

Specific comments on the BDAR and related sections in the EIS are as follows:

Biodiversity Development Assessment Report

1. The relevant case in the BOS calculator is not finalised and submitted in BOAMS as at 21 May 2020.
2. We do not agree that the Paddock Tree module (Appendix 1) is the most appropriate method for this project as it:
 - a. neglects the clearing of the 1.1ha as demonstrated at Figure 16
 - b. relies on parameters that have no bearing on the definition of Paddock Tree established by Appendix 1 of the BAM. Tree Height, canopy diameter, and the presence of intermediate species are examples
 - c. includes an assessment of all the trees on the subject land (Appendix 11 of the BDAR) whether proposed to be cleared or not. Appendix 1 of the BAM only applies to paddock trees proposed to be cleared
 - d. relies on various files provided by the applicant that are not consistent with Appendix 12 (Table 28)
 - e. relies on the PCT being determined by a method which is not indicative of the vegetation integrity of the 1.1ha proposed for clearing.
3. We concur that the PCT on the subject land is PCT 5.
4. It is evident from the various descriptors and photos that the integrity of vegetation on the subject land is likely to be low because of the history of disturbance.
5. Section 4.1.3 of the BDAR describes the area to be cleared, as illustrated by Figure 16. That area is described as 1.1ha of PCT 5 with a vegetation integrity score of 39.4, and a groundcover of less than 25% native grasses and forbs. It is very unlikely that patch has vegetation integrity of 39.4 and groundcover of less than 25% native grasses and forbs. It is unlikely that such condition is homogenous across the patch, especially given the presence of trees at the southern end.
6. The assessor has not determined the homogeneity of vegetation integrity across the 1.1ha to be cleared or undertaken any plots on the land proposed for clearing.
7. It is not appropriate to use a plot outside the 1.1ha intended to be cleared as surrogate indicator of the vegetation integrity of that patch. The assessor must instead establish plots in the patch consistent with paragraph 5.3.4 of the BAM. The Stage 1 Operations Manual includes variations which better suit various shapes and linear patches such as the subject land. Table 4 of the BAM establishes the minimum number of plots, but the assessor is free to undertake as many plots as is necessary to establish a representative vegetation integrity score for that patch. This approach will also confirm any variation in the integrity of the vegetation across the patch. The assessor must use this information to determine the vegetation zones on the development site.
8. The floristics of the 1.1ha patch has not been established. As the only plot was undertaken outside of the 1.1ha patch, we do not agree that it is indicative of the vegetation integrity of the 1.1ha patch to be cleared. Based on the description and photos of the site it is highly likely that the vegetation integrity of the 1.1ha patch is less than 39.4.
9. The potential requirement to offset the clearing of the 1.1ha patch has not been determined. If the assessor assumed the vegetation integrity of the 1.1ha patch was 39.4, they should have applied Stages 1 and 2 of the BAM to determine the BOS credit obligation related to that loss. If the assessor also assumed that vegetation integrity to be homogenous across the patch, that assessment should have included the trees. The assessor instead used the

Paddock Tree module to determine the credit obligation to offset the loss of the two trees, neglecting to determine the credit obligation to offset the loss of the 1.1ha patch.

10. It is more likely that the 1.1ha patch constitutes at least two vegetation zones, one larger to the north of low vegetation integrity, and a second smaller to the south including trees with a higher vegetation integrity.
11. The assessor should determine the homogeneity of vegetation across the 1.1ha patch and establish vegetation zones accordingly. That should determine whether the two trees are part of the same vegetation zone as the rest of the 1.1ha patch or not. If so, the assessor should apply Stages 1 and 2 of the BAM to the whole 1.1ha patch including the two trees. Alternatively, this approach may define a second vegetation zone that includes the two trees. The Paddock Tree module at Appendix 1 may be applied to the trees in that case, but only if the trees are the only vegetation to be cleared.
12. BAM means Biodiversity Assessment Method (not Model).
13. The BDAR regularly departs from the prescribed BAM. Various sections, maps and figures include information that is superfluous and not prescribed by the BAM. We remind the accredited assessor to follow the BAM and avoid adding anecdotal and irrelevant information.
14. We concur that the subject land is unlikely to provide habitat to species listed by the *Environment Protection and Biodiversity Conservation Act 1999*, including Koalas.
15. Section 2.1 of the BDAR describes the process for determining vegetation extent. We note that the removal of native vegetation for use as 'farm timber' is not lawful in the E3 zones of the Corowa Local Environmental Plan 2012.
16. As a development under Part 4 of the *Environmental Planning and Assessment Act 1979*, the land management codes set out in Schedule 5A of the *Local Land Services Act 2013* have no bearing on this matter, the subject BDAR or the BAM regardless of zone.
17. Being zoned E3, the subject land is excluded from the *Local Land Services Act 2013* and the land management codes set out in Schedule 5A of that act cannot be applied on E3 land in any circumstances.
18. Section 4.1 if the BDAR lists six activities ancillary to the proposal. The BAM has not been applied to any clearing associated with these ancillary activities to date. For example, it is not clear if the trees along Haul Road are to be removed for road widening, or if there is additional clearing proposed. We also anticipate various fences and APZs to be established as part of the proposal. The BDAR also describes works to build levees. Clearing associated with these activities is not permitted until the consent authority is satisfied that it has been assessed by applying the BAM in addition to this BDAR, and that any harm to threatened species is offset consistent with that assessment. This may require an additional calculation of BOS credits.
19. The various mitigation measures and commitments are appropriate, noting that the species list for revegetation should be species associated with PCT 5 in the Riverina.

Recommended Action:

The applicant is to:

- Correctly apply the BAM to determine the vegetation integrity of the 1.1ha patch to be cleared by establishing plots in that patch. This is to include a statement of the homogeneity of this patch, including the trees, and determine vegetation zones consistent with the BAM.
- Apply Stages 1 and 2 of the BAM to the vegetation zones in the 1.1ha patch to be cleared (as indicated by Figure 16 of the BDAR), excluding any patches where the vegetation is found to be not native.
- Provide a revised BOS credit calculation to include the clearing of the 1.1ha patch.
- Include all anticipated clearing associated with ancillary activities including road widening, fencing and levees in the BDAR, including any new vegetation zones where that work is anticipated outside of the 1.1ha patch.

- Provide data consistent with Appendix 10 (Table 25 and 26) including shape files and plot data.
- Finalise and submit the BOS calculator related to this proposal.