



Our ref: DOC25/644491
Your ref: SSD-6764-Mod-3

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Dear Gen

Wilpinjong Coal Mine – Pit 8 Extension – Modification 3

Thank you for your request via the NSW Planning Portal dated 30 September 2025 to the Conservation Programs, Heritage and Regulation Group (CPHR) of the NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) inviting comments on the modification application for the Wilpinjong Coal Mine Pit 8 Extension – Modification 3 (the project). This response also incorporates comments from the NSW National Parks and Wildlife Service (NPWS).

The project proposes to extend open cut mining operations to allow for continued coal extraction. The development footprint is approximately 148.1 hectares in size, across two development stages, and includes:

- expansion of the existing open cut mine footprint, including approximately 124 hectares of derived native grassland and 20 hectares of woodland, development of ancillary infrastructure to support open cut mining activities
- the realignment of public infrastructure to facilitate mining activities, including sections of public roads, local low voltage powerlines and telecommunication services.

CPHR acknowledges the effort undertaken by the proponent and accredited assessor in applying Stage 1 of the Biodiversity Assessment Method (BAM). The surveys and habitat assessments conducted are largely compliant with the BAM.

Three entities assessed in the BDAR are listed as Serious and Irreversible Impact (SII) entities, with impacts including:

- 118 hectares of Box Gum Woodland critically endangered ecological community (CEEC), of which 3 hectares is intact high-quality woodland and 113 hectares is derived native grassland
- 29 hectares of mapped important habitat for the regent honeyeater
- 1 hectare of direct impacts to breeding habitat for large-eared pied bat and eastern cave bat, with an additional 24 hectares of escarpment habitat likely to be indirectly impacted.

CPHR have not conducted a SII assessment, as many of the recommendations in this response may result in the information informing the assessment of SII entities to change. The Biodiversity Development Assessment Report (BDAR) contains proposals to minimise and mitigate SII for the above listed entities. We have evaluated these proposals and have provided recommendations on their adequacy and implementation. We will complete the SII assessment when the BDAR has been updated to address these recommendations at the Response to Submissions stage.

The indirect impacts of the project have not been adequately assessed. CPHR is concerned about the potential for blasting and vibration to indirectly impact a significant escarpment habitat used by breeding microbats. We have recommended additional mitigation and minimisation measures be proposed. If residual impacts remain likely after mitigation strategies have been considered, further avoidance measures should be implemented. This should include reducing the development footprint to maintain a minimum 100-metre buffer from the escarpment habitat.

Finally, NPWS have provided recommendations that additions to the Wilpinjong groundwater monitoring network be made to validate claims in the modification report and adequately assess cumulative impacts. In addition, NPWS recommend that enhancement conservation area C be increased to create a more effective buffer between mining operations and Munghorn Gap Nature Reserve.

DCCEEW recommends that the Department of Planning, Housing and Infrastructure (DPHI) requests an updated BDAR that incorporates the recommendations listed in **Attachment A**. The updated BDAR should be provided with the Response to Submissions (RTS) report. We welcome the opportunity to continue working with the proponent to ensure the full extent of impacts is identified, and appropriate avoidance and SAI mitigation measures are implemented.

A summary of CPHR's and NPWS's recommendations are provided in **Attachment A**. CPHR's advice on SAI minimisation measures is provided in **Attachment B**, our assessment of SAI reports are provided in **Attachment C** and our detailed comments are provided in **Attachment D**. NPWS's detailed comments are provided in **Attachment E**.

If you have any questions about this advice, please do not hesitate to contact Ben Ellis, Principal Project Officer, via ben.ellis@environment.nsw.gov.au or (02) 8275 1838.

Yours sincerely



Sarah Carr
Director North West
Conservation Programs, Heritage and Regulation Group

29 October 2025

Attachment A – DCCEEW's Recommendations

Attachment B – CPHR's advice on Serious and Irreversible Impact Entities

Attachment C – CPHR's Assessment of SAI Reports

Attachment D - CPHR's Detailed Comments

Attachment E – NPWS's Detailed Comments

CPHR's recommendations

Wilpinjong Coal Mine – Pit 8 Extension – Modification 3

Acronyms

AOO	Area of Occupancy
BAM	Biodiversity Assessment Method
BC Act	Biodiversity Conservation Act 2016
BDAR	Biodiversity Development Assessment Report
BOAMS	Biodiversity Offset and Management System
CEEC	Critically Endangered Ecological Community
CPHR	Conservation Programs, Heritage and Regulation
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DNG	Derived Native Grassland
DPHI	Department of Planning, Housing and Infrastructure
EOO	Extent of Occurrence
GRNP	Goulburn River National Park
IHM	Important Habitat Map
ML	Megalitre
NPWS	National Parks and Wildlife Service
PPV	Peak Particle Velocity
RMR	Rock Mass Rating
SAll	Serious and Irreversible Impact
SVTM	State Vegetation Type Map
TBDC	Threatened Biodiversity Data Collection
TEC	Threatened Ecological Community
TSSC	Threatened Species Scientific Committee

Attachment B recommendations

Box Gum Woodland SAll minimisation proposal

1. Secure a conservation area for Box Gum Woodland CEEC within 12 months of project approval and manage it under a Biodiversity Stewardship Site Agreement (BSA).
2. Include a framework of specific and measurable targets in the BDAR where grassland areas are proposed to be restored to Box Gum Woodland CEEC.
3. Prepare and implement a management and monitoring plan for the conservation area prior to construction commencing. The management plan should be approved by the DPHI Secretary and should be to the satisfaction of CPHR.

4. Ensure all actions in the management plan adhere to the Specific, Measurable, Achievable, Realistic and Timebound (SMART) principles. Actions should be fully costed and include contingency measures that would be implemented if monitoring indicates that management actions are not tracking towards success criteria.
5. If secured under a BSA, all credits generated should be immediately retired by the proponent and not used for offsetting.
6. Consult with CPHR to ensure the size of the conservation area, and the proposed measures to mitigate and minimise impacts, will contribute to Box Gum Woodland CEEC recovery and effectively minimise potential SAIL.

Regent honeyeater SAIL minimisation proposal

1. Propose specific SAIL minimisation measures for the regent honeyeater that include:
 - a. conservation of land containing mapped important habitat for the species, and/or
 - b. conservation actions to increase the size and density of the wild population, potentially achieved by contributing funding to captive breeding programs.
2. Consult with CPHR to ensure that proposed measures to minimise impacts will contribute to the recovery of regent honeyeater.

Large-eared pied bat and eastern cave bat SAIL minimisation proposal

1. Install 6 artificial roosts in local mine site rehabilitation areas for the eastern cave bat and large-eared pied bat. Two should be installed within 12 months of approval, with the remaining four installed within 24 months.
2. Prepare a detailed monitoring plan for artificial microbat roosts prior to construction commencing. This plan should be approved by the DPHI Secretary and should be to the satisfaction of CPHR.
3. Establish a precautionary and conservative blasting threshold prior to approval.
4. Further strategies to minimise and mitigate indirect impacts from blasting and vibration should be proposed. If residual indirect impacts are likely, or remain uncertain, the development footprint should be reduced to maintain a minimum 100-metre buffer from the escarpment habitat.
5. Consult with CPHR to ensure that proposed measures to minimise impacts will be effective for the large-eared pied bat and eastern cave bat.

Attachment C and D recommendations

- 1.1 The SAIL assessment must fully consider the importance of the Mudgee – Wollar region in the context of the long-term survival of the regent honeyeater.
- 2.1 All available resources, including the national regent honeyeater recovery plan, should be used to determine whether the development area may be utilised by regent honeyeaters.
- 3.1 Analyse cumulative losses of habitat in the regent honeyeater SAIL assessment.
- 4.1 Mitigation measures proposed for the regent honeyeater must address the SAIL principles and address the severe threat of extinction faced by the species.
- 5.1 Ensure that the quantum of impact and proposed mitigation measures for regent honeyeater are aligned between the BDAR and the SAIL report.
- 6.1 Develop additional mitigation and minimisation measures to address potential disturbance to bat colonies within the adjacent escarpment habitat. Where residual impacts remain likely, or

uncertain after mitigation strategies have been considered, apply further avoidance measures, including reducing the development footprint to maintain a minimum 100-metre buffer from the escarpment habitat.

- 7.1 In the absence of detailed rock mass strength surveys being conducted prior to approval, establish a poor quality rock peak particle velocity threshold for the western escarpment prior to project approval.
- 8.1 Review the Threatened Species Scientific Committee's conservation assessment and other key publicly available information when revising the SAI report for Box Gum Woodland CEEC.
- 8.2 Remove statements from the SAI report claiming there is no SAI for Box Gum Woodland CEEC, as this is a matter for the consent authority to determine.
- 8.3 Update the SAI report to provide the necessary information for the decision maker to adequately evaluate the project's contribution against Principles 1 for Box Gum Woodland CEEC.
- 9.1 Remove the overestimated analysis of Box Gum Woodland CEEC extent in the SAI report.
- 10.1 The accredited assessor should apply for a review of the regent honeyeater important habitat map if evidence exists that the map contains discrepancies.
- 11.1 Include all plots in the BAM-C or provide justification in the BDAR as to why they have not been entered.
- 12.1 Clearly list the specific dates of targeted survey for each species and the number of survey replicates undertaken (where relevant).

Attachment E recommendations

- 13.1 Install a ground water monitoring location downstream of Wollar Creek to validate predictions from the groundwater impact assessment and its contribution to cumulative groundwater drawdown.
- 14.1 Increase proposed enhancement conservation area C to be inclusive of adjacent uncleared vegetation as depicted in Figure 5 of this response.

CPHR's Advice on Serious and Irreversible Impact Entities

Wilpinjong Coal Mine – Pit 8 Extension – Modification 3

The Conservation Programs, Heritage and Regulation (CPHR) Group notes that section 9 of the Biodiversity Development Assessment Report (BDAR) relies on the reports in Attachment 7 of the modification application which analyse the status of Serious and Irreversible Impact (SAIL) entities and potential impacts of the project. The BDAR often references these reports over well-established figures and peer-reviewed literature, including final determinations and national recovery plans. This impacts on the provision of an objective SAIL assessment. As such, we have provided a separate review of these documents in **Attachment C**.

CPHR has not completed a SAIL assessment, as many of the recommendations in **Attachments B, C and D** may result in the information informing the SAIL assessment to change, which will impact the strategies required to minimise and mitigate SAIL. A SAIL assessment will therefore be conducted on the updated BDAR submitted at the Response to Submissions phase of the project which should incorporate CPHR's recommendations from this response.

Table 1: CPHR's evaluation and recommendations for proposed SAIL minimisation and mitigation measures.

SAIL entity	SAIL quantum	Minimisation proposal	CPHR comments on minimisation proposal	CPHR's recommendations on minimisation proposal
Box Gum Woodland CEEC	118 ha of Box Gum Woodland CEEC (excluding 2 ha of plantation) comprising: 3 ha of intact high-quality woodland (vegetation integrity (VI) score >80) 2 ha of moderate-quality woodland (VI score ~50) 113 ha of derived native grassland (DNG), mostly of	The BDAR refers to a 50 ha revegetation area, located north of Wilpinjong Creek (hereafter referred to as the conservation area). It is unclear what conservation mechanism would be used to secure the site. The proponent indicates this area may be used to offset the project's impacts, contingent on its future registration as a Biodiversity Stewardship Agreement (BSA). Minimal information has been provided regarding the current condition of the	The proposed measures to minimise potential SAIL on Box Gum Woodland CEEC should address the full extent of the project's impacts. The BDAR acknowledges that all vegetation proposed for clearing is consistent with the Scientific Committee's final determination for this community. The proposed conservation measure relies heavily on the restoration of Box Gum Woodland from DNG. The BDAR does not address the risks associated with active revegetation, particularly where the baseline condition of the vegetation is low. Furthermore, the cumulative loss of Box Gum Woodland CEEC due to ongoing development pressure may outpace the success of long-term restoration efforts. The BDAR should justify how the proposed 50 ha revegetation area, which is currently less than a 1:1 ratio of conserved vegetation to impacted vegetation, is	1. Secure a conservation area for Box Gum Woodland CEEC within 12 months of project approval and manage it under a Biodiversity Stewardship Site Agreement (BSA). 2. Include a framework of specific and measurable targets in the BDAR where grassland areas are proposed to be restored to Box Gum Woodland CEEC. 3. Prepare and implement a management and monitoring plan for the conservation area prior to construction commencing. The management plan should be approved by the DPHI Secretary and should be to the satisfaction of CPHR. 4. Ensure all actions in the management plan adhere to the Specific, Measurable, Achievable, Realistic and Timebound

	moderate quality (~30 VI score). Consistent with SAIL Principle 1.	conservation area, aside from the statement that it does not contain any woodland vegetation. Similarly minimal information has been provided on specific targets for restoration activities.	commensurate to the residual impact of the project, and will adequately minimise potential SAIL impacts. To support the BDAR's claims of achieving a "net gain," the proposal should include an expanded restoration area, firm commitments, and clear, measurable targets for restoration outcomes. In addition, CPHR does not support the proponent's proposal to use credits from these conservation areas for future offsetting. Doing so would not result in a net benefit for the CEEC, which is inconsistent with the intent of the BDAR's SAIL mitigation proposal. CPHR remains open to discussing alternative approaches with the proponent, including different ratios of woodland to DNG to minimise SAIL. Ongoing engagement with us will ensure that any proposed measures to minimise and mitigate impacts to Box Gum Woodland CEEC are appropriate and likely to succeed.	(SMART) principles. Actions should be fully costed and include contingency measures that would be implemented if monitoring indicates that management actions are not tracking towards success criteria. 5. If secured under a BSA, all credits generated should be immediately retired by the proponent and not used for offsetting. 6. Consult with CPHR to ensure the size of the conservation area, and the proposed measures to mitigate and minimise impacts, will contribute to Box Gum Woodland CEEC recovery and effectively minimise potential SAIL.
Regent honeyeater	29 ha of mapped regent honeyeater important habitat. Consistent with SAIL Principle 1 and 2.	The BDAR provides limited specific proposals to minimise SAIL for this species or contribute to its recovery. The general mitigation measures referenced include: • mine site rehabilitation • offsite revegetation • pre-clearance protocols • noisy miner control (referenced in SAIL report only).	Measures to minimise SAIL for regent honeyeater should be specific and cognisant of the severe threat of extinction faced by the species. This should include measures to contribute to the species' recovery in the wild, not just standard measures to mitigate the potential construction impacts of the project. CPHR suggest that measures to contribute to the recovery of the regent honeyeater could include: • In-perpetuity conservation of land containing mapped important habitat for the species. • Conservation actions to increase the size and density of the wild population, so that continued decline trajectories can be curtailed (Heinsohn et al. 2022). This could be achieved by contributing funding to captive breeding programs. The BDAR should justify the impact to conservation ratio the proposed minimisation measures will achieve, and how this will minimise a potential SAIL outcome. This is because the regent honeyeater is critically endangered and in a rapid rate of decline with a rapidly dwindling population. Based on the best available population viability models the species is predicted to be extinct within 20 years under current management strategies (before any impacts from this project) (Heinsohn et al. 2022).	1. Propose specific SAIL minimisation measures for the regent honeyeater that include: a. conservation of land containing mapped important habitat for the species, and/or b. conservation actions to increase the size and density of the wild population, potentially achieved by contributing funding to captive breeding programs. 2. Consult with CPHR to ensure that proposed measures to minimise impacts will contribute to the recovery of regent honeyeater.

Large-eared pied bat and eastern cave bat	The direct loss of 1 hectare of breeding habitat, comprising: two rocky knolls located within the proposed open-cut mining pits, and a small rocky area on the lower slopes of adjacent escarpment habitat. An additional 24 ha of escarpment habitat is likely to be indirectly impacted. Consistent with SAIL Principle 4.	For the direct loss of breeding habitat, the BDAR proposes to install 6 artificial roost structures in nearby mine rehabilitation areas. For the indirect impacts to adjacent escarpment habitat, the BDAR proposes to establish an upper vibration blasting threshold to limit physical damage to sensitive cave and rocky habitat (which will be set post-consent).	While there is currently no evidence of successful compensation for the loss of natural cave breeding habitat for these species (excluding incidental use of mine adit features), the proposed artificial roost trial is innovative and informed by sound ecological research. CPHR accepts the proposed trial as an attempt to ameliorate the direct loss of breeding habitat. Given the uncertainty of success and the novel nature of the techniques being trialled, the activity should be supported by a robust monitoring plan which includes clearly defined contingency measures in the event the trial is unsuccessful. The establishment of upper vibration blasting thresholds should be determined prior to project approval. A precautionary and conservative threshold should be adopted initially, until detailed studies are undertaken that justify any relaxation of these limits (see recommendations in Attachment C). In addition, CPHR considers that indirect disturbance to neighbouring escarpment habitat remains likely due to blasting and vibration impacts and given the proximity of mining operations. Further strategies to minimise these impacts should be proposed. If residual impacts remain likely, or uncertain, CPHR recommends additional avoidance measures be implemented. This should include reducing the development footprint to maintain a minimum 100-metre buffer from the escarpment habitat (see recommendations in Attachment C).	1. Install 6 artificial roosts in local mine site rehabilitation areas for the eastern cave bat and large-eared pied bat. Two should be installed within 12 months of approval, with the remaining four installed within 24 months. 2. Prepare a detailed monitoring plan for artificial microbat roosts prior to construction commencing. This plan should be approved by the DPHI Secretary and should be to the satisfaction of CPHR. 3. Establish a precautionary and conservative blasting threshold prior to approval. 4. Propose further strategies to minimise and mitigate indirect impacts from blasting and vibration. If residual indirect impacts are likely, or remain uncertain, the development footprint should be reduced to maintain a minimum 100-metre buffer from the escarpment habitat. 5. Consult with CPHR to ensure that proposed measures to minimise impacts will be effective for the large-eared pied bat and eastern cave bat.
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CPHR's Assessment of SAI Reports

Wilpinjong Coal Mine – Pit 8 Extension – Modification 3

Regent honeyeater

1. The SAI report does not provide sufficient consideration of important habitat map areas

The report fails to recognise the reason the important habitat map (IHM) areas were established for the regent honeyeater, specifically that they are considered important to support breeding for the species. IHMs are restricted to species that are highly mobile and difficult to reliably detect by survey, and for which DCCEEW holds extensive, long-term data sets that identify important areas in the landscape for that species.

The SAI report under-values the importance of these mapped areas. Regent honeyeaters may only occupy sites within the mapped important habitat areas a couple of months a year and may occupy some sites only periodically when conditions are particularly favourable.

Historically, the Wollar – Wilpinjong – Munghorn Gap area was regularly used for breeding by regent honeyeaters. Documented breeding events in the area have declined with the overall population decline of the species. Should actions enacted as part of the national regent honeyeater recovery program result in an increase in the regent honeyeater population it is likely that areas that were previously used on a regular basis will, again, be increasingly utilised. The regent honeyeater recovery plan is very clear that protection of areas of regent honeyeater breeding and foraging habitat is crucial for the survival of the species.

Recommendation:

- 1.1 The SAI assessment must fully consider the importance of the Mudgee – Wollar region in the context of the long-term survival of the regent honeyeater.

2. Assessment of the potential for regent honeyeaters to utilise the project area does not consider all available information.

The project area is in the Mudgee – Wollar area, listed in the national regent honeyeater recovery plan as habitat critical to the survival of the regent honeyeater.

The SAI report states that no regent honeyeaters were recorded over 242 survey days between September 2022 and February 2025. The report concludes that *“it appears there is 0% of the total NSW population using the Modification area, and a low likelihood of greater than 0%”*. It is not surprising the species was not recorded as the species has a very low population size and is very mobile. While the report provides details of the plant community types (PCTs) that contain eucalypt species that provide food resources for the regent honeyeater it does not describe the environmental conditions at the time of the surveys and whether these tree species were flowering.

The absence of regent honeyeaters from a given location at a given time cannot be taken as evidence that that location is unsuitable habitat. If there are potential food plants present, then that site may be utilised by regent honeyeaters if conditions are favourable. This opportunistic habitat use needs to be considered when assessing the relative importance of a local area for regent honeyeaters, in addition to the knowledge that variation in local conditions is a crucial predictor of regent honeyeater presence/absence and site utilisation.

The regent honeyeater recovery plan is very clear that protection of intact areas of regent honeyeater breeding and foraging habitat is crucial for the survival of the species, however the SAI report largely fails to consider the information and recommendations provided in this plan.

Recommendation:

- 2.1 All available resources, including the national regent honeyeater recovery plan, should be used to determine whether the development area may be utilised by regent honeyeaters.

3. Cumulative losses due to development pressure in the region should be assessed

The national recovery plan for the regent honeyeater lists “*on-going clearing of woodland and forest containing the key eucalypt species preferred by regent honeyeaters*” as a major threat. Fragmentation and degradation of remnant habitat is also considered a threatening process under the Biodiversity Assessment Method (BAM).

The SAI assessment should include an assessment of cumulative losses from historical, recent and proposed development in the region for the regent honeyeater.

Recommendation:

- 3.1 Analyse cumulative losses of habitat in the regent honeyeater SAI assessment.

4. Proposed mitigation measures must directly address the SAI principles

The regent honeyeater has been identified by DCCEEW as a threatened entity at risk of a SAI due to Principles 1 and 2.

Dr Debus’ report states that the purpose of the report is to evaluate if any residual impacts (i.e. impacts that would remain after implementation of proposed minimisation/mitigation measures) are serious and irreversible. The report proposes to avoid direct and indirect impacts to regent honeyeaters through mine site rehabilitation, offsite revegetation and noisy miner control.

These measures are aimed at mitigating further impact rather than avoiding direct impacts to regent honeyeater. No consideration is given to the time required for these proposed mitigation measures to provide the conditions required for the species concerned. Noisy miner control is likely to benefit regent honeyeaters within short- and medium-term timeframes; however, mine rehabilitation and habitat restoration can only be considered long-term measures.

The regent honeyeater is a critically endangered species facing an extremely high risk of extinction in Australia in the immediate future. Measures that do not mitigate impacts within the timeframe that extinction may occur should be considered ineffective. The report fails to explain how the proposed mitigation measures will directly address the SAI principles.

Recommendation:

- 4.1 Mitigation measures proposed for the regent honeyeater must address the SAI principles and address the severe threat of extinction faced by the species.

5. The SAI report and SAI assessment in the BDAR should be consistent

CPHR have identified inconsistencies between the SAI report prepared for the regent honeyeater and the regent honeyeater SAI assessment in the BDAR, these include:

- the SAI report states that 19.6 ha of potential regent honeyeater foraging habitat will be impacted by the development, this is inconsistent with the BDAR that identifies ~29 ha of mapped important habitat
- the proposal to implement noisy miner control is only referenced in the SAI report, the BDAR indicates that noisy miner control is not necessary as “*this species already has a stronghold on the habitat on site*”.

Recommendation:

- 5.1 Ensure that the quantum of impact and proposed mitigation measures for regent honeyeater are aligned between the BDAR and the SAI report.

Eastern cave bat and large-eared pied bat

6. The assessment underestimates SAI to microbat breeding habitat

The SAI report and SAI assessment within the BDAR for the large-eared pied bat and eastern cave bat identifies 1 hectare of rocky bat habitat as being directly impacted within the development footprint. However, these assessments provide minimal consideration of the adjacent escarpment, which is known to support breeding habitat for both species.

According to the Threatened Biodiversity Data Collection (TBDC), any impact on breeding habitat for these species may be considered potentially serious and irreversible. Breeding habitat includes PCTs **within 100 metres** of rocky areas containing caves, overhangs, crevices, cliffs, escarpments, or artificial structures such as old mines, tunnels, culverts, or derelict buildings.

Approximately 24 ha of escarpment habitat has been mapped immediately adjacent to the proposed development. Much of the western portion of the proposed open-cut mining pit encroaches within 100 metres of this habitat (see Figure 1 below). CPHR considers this area a high priority for impact avoidance and mitigation.

The SAI report references recent surveys that recorded microbat breeding activity 131–247 metres from active mining operations, suggesting that indirect disturbance is similarly unlikely for the project. However, these studies are not directly comparable, as the project will occur at significantly closer distances to the neighbouring breeding habitat (in some cases within 15 metres of the escarpment). The SAI report itself acknowledges that such disturbances may affect bats roosting in caves, and that limited research exists on the effects of blasting near active roosts.

While some mitigation measures are proposed to protect the physical integrity of sandstone features, there is limited consideration of strategies to reduce disturbance to the occupying bat colonies. Given the proximity of proposed mining operations to known breeding habitat, CPHR is concerned that blasting and vibration may disrupt maternal colonies. Disturbance during daylight hours could result in bats exiting roosts prematurely, increasing vulnerability to predation and also risks the abandonment of young.

Additional mitigation and minimisation measures should be specifically developed to address potential disturbance to bat colonies within the adjacent escarpment habitat, in accordance with Section 8.2.2 of the BAM 2020. If residual impacts remain likely, or uncertain after mitigation strategies have been considered, CPHR recommends further avoidance measures. This should include reducing the development footprint to maintain a minimum 100-metre buffer from the escarpment habitat.

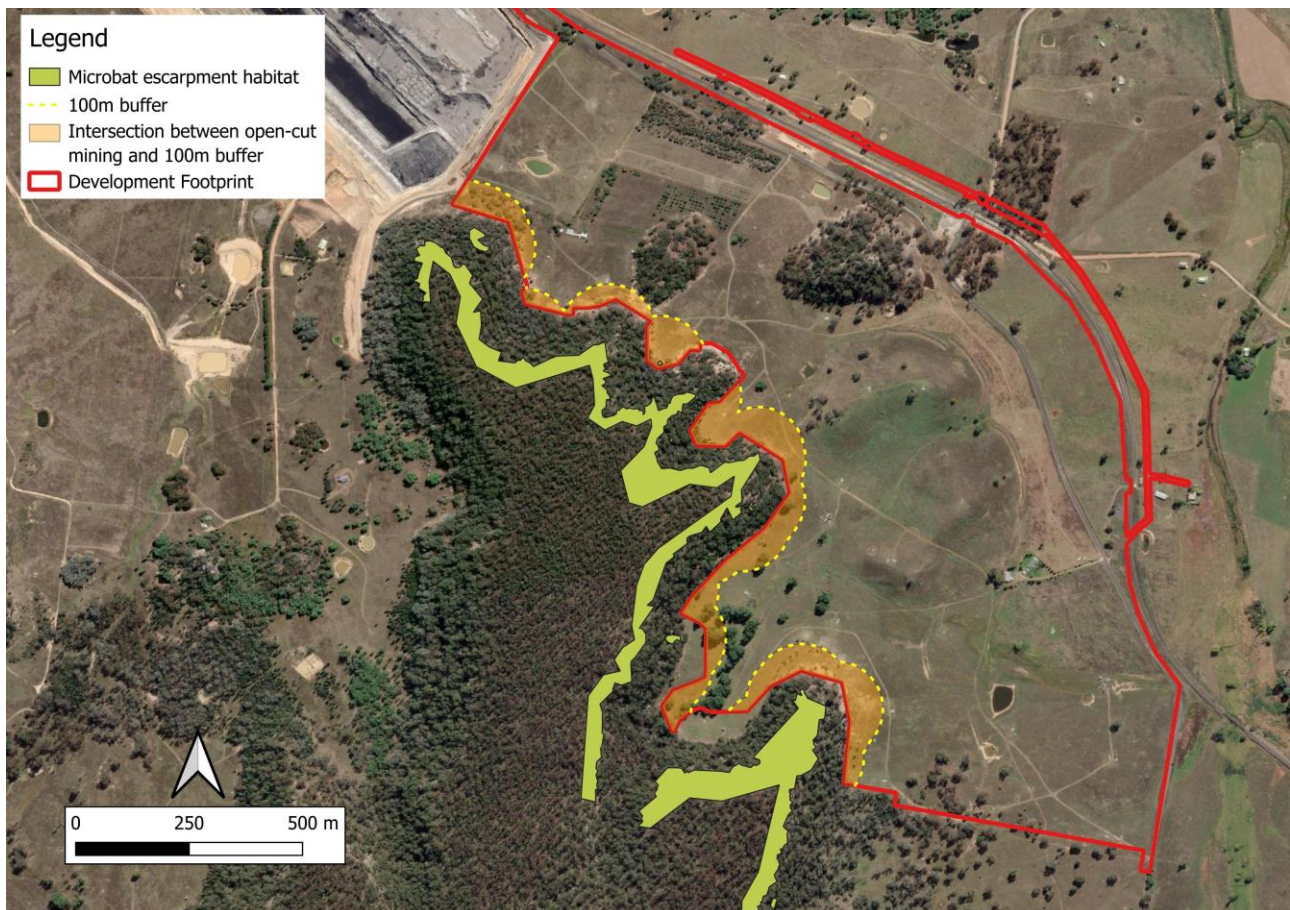


Figure 1 Microbat breeding habitat immediately adjacent to proposed mining operations, and 100m protection buffer

Recommendation:

- 6.1 Develop additional mitigation and minimisation measures to address potential disturbance to bat colonies within the adjacent escarpment habitat. Where residual impacts remain likely, or uncertain after mitigation strategies have been considered, apply further avoidance measures, including reducing the development footprint to maintain a minimum 100-metre buffer from the escarpment habitat.

7. Establishing specific thresholds for minimising damage to escarpment breeding habitat should not be deferred

CPHR notes that a series of measures have been proposed to avoid and mitigate physical damage to mapped rocky bat habitat from blasting activities. This includes “*establishing an upper vibration blasting limit based on site specific evaluation of local rock mass strength*”.

CPHR note that the initial geological sensitivity assessment prepared for the modification application (PSM 2025)¹ has only been based on limited information, for example:

- no blasting predictions have been provided to assess the potential impacts on sensitive geological features
- the rock mass rating (RMR) of all the sensitive geological features which may be present in the neighbouring escarpment have not been comprehensively surveyed

¹ PSM (2025). *Initial Assessment of Geological Feature Sensitivity – Pit 8 Extension and Rocky Hill*

- the natural frequency of the escarpment compared to blasting has not been assessed.

Conservative provisional peak particle velocity (PPV) limits have been provided in the case that poor quality rock is present in the neighbouring escarpment (Figure 2 below). However, the BDAR proposes to defer establishment of PPV thresholds until further detailed surveys of RMR are conducted post-consent.

Given the potential implications of impacts for microbat colonies and the currently proposed proximity of escarpment habitat to proposed open-cut pits, upper vibration thresholds should be established prior to project approval. Precautionary thresholds (those set for the potential presence of poor quality RMR in Figure 2 below) should be adopted initially, until detailed studies are undertaken that justify any relaxation of these limits.

Table 6 – Provisional PPV Limits for Sensitive Geological Features

Rock Mass Classification	PPV Threshold Criteria (mm/s)	PPV Upper Limit (mm/s)
Poor Quality Rock (RMR < 45)	15	25
Better Than Poor Quality Rock (RMR > 45)	40	50

Figure 2 Extract from the initial geological sensitivity assessment identifying peak particle velocity thresholds if poor quality rock is present.

Recommendation:

- 7.1 In the absence of detailed rock mass strength surveys being conducted prior to approval, establish a poor quality rock peak particle velocity threshold for the western escarpment prior to project approval.

Box Gum Woodland CEEC

8. The SAI report does not assess the principles under which Box Gum Woodland CEEC is listed and omits widely available information on the community's status

The SAI report provides a conclusion "*that the impact of the project on Box-Gum Woodland CEEC should not be regarded as serious and irreversible*". Determining whether there is a SAI is the role of the consent authority. Conclusions on the impact of the project not being considered SAI should be removed from the report.

The report also does not provide the information necessary for the decision maker to adequately evaluate the extinction risk of Box Gum Woodland CEEC against the relevant principles under which the community is listed. Specifically, it does not adequately assess the project's contribution to SAI Principles 1 and 2, which relate to the community's rapid rate of decline and its extensive environmental degradation.

The report does not directly acknowledge that Box Gum Woodland CEEC has undergone a rapid rate of decline under Principle 1. It instead provides a generalised statement that "*The impact of the Project on Box-Gum Woodland CEEC as a whole would be extremely low, to the degree that it would be unlikely to change the trajectory of the ecological community*", without justification. In addition, section 5 of the SAI report does not address Principle 1, focusing instead on comparing the area of Box Gum Woodland CEEC to be removed against an inaccurate estimate of the community's current state-wide extent (see section 9 of this response below). This comparison is irrelevant for assessing the significance of the project's impact to Box Gum Woodland CEEC's trajectory of decline.

In addition, key publicly available information detailing the CEEC's rapid rate of decline and wider status in NSW is omitted from the SAI report, such as the Threatened Species Scientific Committee's conservation assessment. This is a critical document in evaluating the risk of extinction for Box Gum Woodland CEEC and its legal listing as a TEC; it should be a key reference used in any report considering SAI risk.

The SAI report does not clearly justify how the removal of 118 ha Box Gum Woodland CEEC would not significantly contribute to the community's continuing decline or further degrade its overall condition. The report therefore does not provide sufficient or impartial assistance to the decision-maker in evaluating the significance of the project's impact on the Box Gum Woodland CEEC.

Recommendations:

- 8.1 Review the Threatened Species Scientific Committee's conservation assessment and other key publicly available information when revising the SAI report for Box Gum Woodland CEEC.
- 8.2 Remove statements from the SAI report claiming there is no SAI for Box Gum Woodland CEEC, as this is a matter for the consent authority to determine.
- 8.3 Update the SAI report to provide the necessary information for the decision maker to adequately evaluate the project's contribution against Principles 1 for Box Gum Woodland CEEC.

9. The SAI report significantly overestimates the geographic extent of Box Gum Woodland CEEC remaining in NSW

The SAI report states that approximately 16,090,000 ha of Box Gum Woodland CEEC remains; a figure that is inconsistent with the 7,103,743 ha cited in Attachment 1 of the same report. This discrepancy is not explained, and the method used to derive these estimates contains several inaccuracies and unsupported assumptions.

Attachment 1 of the SAI report reviews the current extent of occurrence (EOO) and area of occupancy (AOO) of Box Gum Woodland CEEC in NSW. The SAI report uses the NSW State Vegetation Type Map (SVTM) to calculate a total of 1,859,177 ha of Box Gum Woodland, of which 1,788,703 ha is of the woodland form (approximately 96%) and 70,474 ha is described as 'derived'. However, the SVTM includes PCTs with only partial associations to the CEEC i.e. they either may or may not conform to the community. This likely results in an overestimation of the actual extent of the community. Appendix 1 of the report also contains errors in identifying TEC associations for some PCTs.

The report also uses the NSW Landuse data layer '*Grazing native vegetation*' (NSW DCCEEW 2023) to further estimate areas of derived native grassland (DNG) associated with Box Gum Woodland CEEC. This approach is problematic, as this land use category encompasses a wide range of vegetation types. It also is not clear from the methodology if areas of Box Gum Woodland CEEC identified on the SVTM have been discounted from the NSW Landuse data layer to ensure they were not counted twice from both mapping datasets.

The SAI report combines the above two likely overestimated calculations, leading to an inflated and confused estimate of the community's extent.

While the final determination acknowledges some uncertainty in estimating the current and pre-1750 extent of the community, the NSW Conservation Assessment (NSW TSSC 2020) estimates the current extent in NSW at 250,729 ha, compared to a pre-1750 extent of 3,717,366 ha. These

figures are supported by numerous other peer-reviewed sources (Benson 2008², Tozer et al. 2010³, Armstrong et al. 2013⁴), and represents a reduction of more than 90% in the community.

In contrast the SAI report's estimate exceeds both the contemporary understanding of the community's extent (according to its conservation assessment) by approximately 6.85 million ha and even exceeds the pre-1750 extent i.e. stating that there is almost double the amount of Box Gum Woodland CEEC currently present than what was present prior to European colonisation. The SAI report does not present new or compelling evidence to support this deviation.

The consensus of peer-reviewed literature is that Box Gum Woodland CEEC has undergone, and continues to undergo, a significant decline associated with the clearing of vegetation. The report's focus on disputing well-established figures and peer-reviewed literature detracts from a meaningful assessment of the project's potential significant impacts. As a result, the report does not provide a reliable basis for evaluating the significance of the project's contribution to the risk of SAI for Box Gum Woodland CEEC.

Recommendation:

- 9.1 Remove the overestimated analysis of Box Gum Woodland CEEC extent in the SAI report.

² Benson et al (2008) *New South Wales vegetation Classification and Assessment: Part 2 Plant communities of the NSW South-western Slopes Bioregion and update of NSW Western Plains plant communities*, version 2 of the NSWVCA database. Cunninghamia 10, 599–673.

³ Tozer et al (2010) *Native vegetation of southeast NSW: a revised classification and map for the coast and eastern tablelands*. Cunninghamia 11, 359–406.

⁴ Armstrong et al (2013) *Plant communities of the upper Murrumbidgee catchment in New South Wales and the Australian Capital Territory*. Cunninghamia 13, 125–265

CPHR's recommendations and detailed comments

Wilpinjong Coal Mine – Pit 8 Extension – Modification 3

10. A map review of important habitat mapping is available

The BDAR identifies 29 ha of important habitat proposed to be cleared for the regent honeyeater. Of this, 7 ha are described in the BDAR as derived grassland, exotic pine trees, dead grapevines and a farm dam, which are stated not to constitute important habitat for the species.

Assessors may seek a review of the important habitat maps, and CPHR encourages submission of a map review request if the proponent identifies potential mapping errors. Until a review is finalised, DPHI should consider the current regent honeyeater map valid and maintain the total SAI quantum for regent honeyeater at 29 ha.

Recommendation:

- 10.1 The accredited assessor should apply for a review of the regent honeyeater important habitat map if evidence exists that the map contains discrepancies.

11. Vegetation plots have been completed but not included in the BAM-C

From reviewing the plot data provided in the BAM-C against the plots referenced in the baseline flora survey report (Appendix 1) it appears that two plots have not been included in the BAM-C (plot identifiers – 230613P6 and 230613P7).

Minimum plot numbers have been met for all vegetation zones, however if additional plots have been completed and they are representative of the relevant vegetation zone they should be entered in the BAM-C. If plots have not been used because they are not within the development footprint, are not representative of the vegetation zone, or for any other reason, this should be clearly justified in the BDAR.

Recommendation:

- 11.1 Include all plots in the BAM-C or provide justification in the BDAR as to why they have not been entered.

12. Insufficient detail has been provided for threatened species survey timing and site replicates

While the BDAR outlines the total number of days and nights of targeted survey effort and provides mapping of survey site locations, it does not include a summary detailing the specific dates survey was undertaken for each species. It also does not indicate how many replicates were undertaken at individual site locations (where relevant). CPHR requires this level of detail to adequately assess the survey effort for threatened species and ensure that surveys complied with seasonal survey windows.

Recommendation:

- 12.1 Clearly list the specific dates of targeted survey for each species and the number of survey replicates undertaken (where relevant).

NPWS's recommendations and detailed comments

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13. Additions should be made to the groundwater monitoring network to address increased cumulative impacts

The proposed modification is an upgradient activity that is predicted to affect the watercourses draining toward the Goulburn River in Goulburn River National Park (GRNP) via Wilpinjong and Wollar creeks. In the Groundwater Impact Assessment (SLR 2025⁵) baseflow contributions to an unnamed tributary of the Goulburn River are predicted to decrease by 1.8 mega litres (ML)/year during the mining period and by 4ML/year during the early recovery period (post-mining). It is not clear how those predictions will be validated, as there is not a ground water monitoring location proposed near the GRNP (See Figure 3 below).

In addition, the assessment predicts the maximum cumulative impacts, which include the modification along with existing and approved operations, on groundwater levels and surface water baseflow. The cumulative baseflow loss is predicted to become negative approximately 30 years post-mining (in 2063). This is attributed to the hydraulic properties of the waste rock in backfilled pits allowing for increased rainfall recharge and subsequent discharge to surface water (See Figure 4).

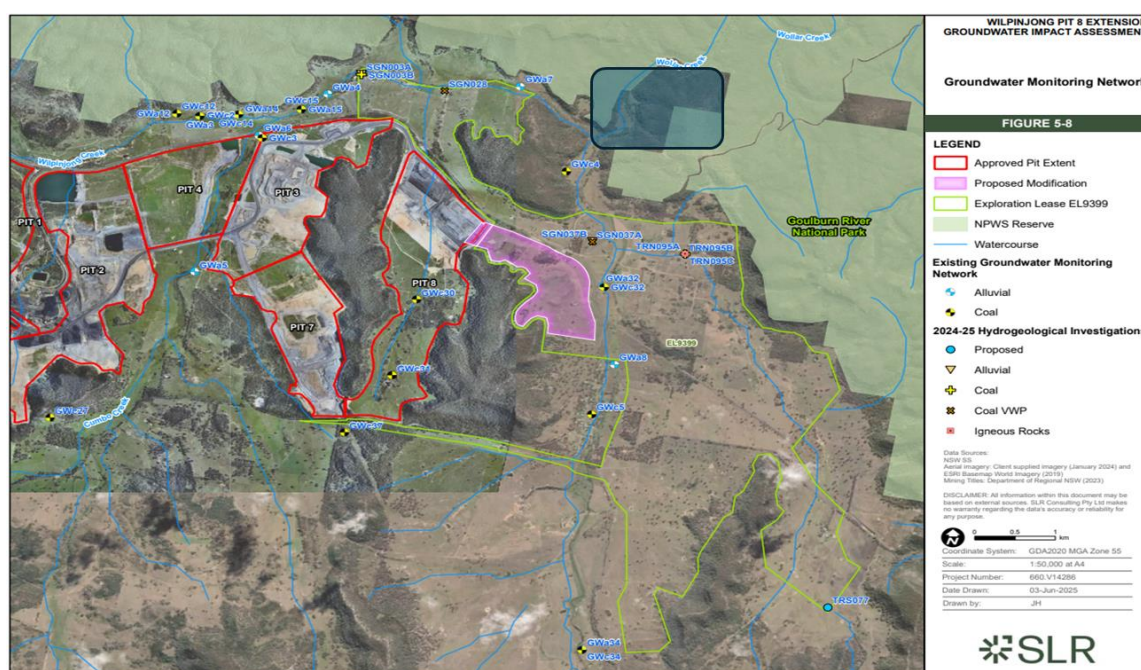


Figure 3 Extract from the Groundwater Impact Assessment showing the absence of a proposed groundwater monitoring station adjacent to Goulburn River National Park.

⁵ SLR Consulting Australia (2025) Pit 8 Extension Modification Groundwater Impact Assessment

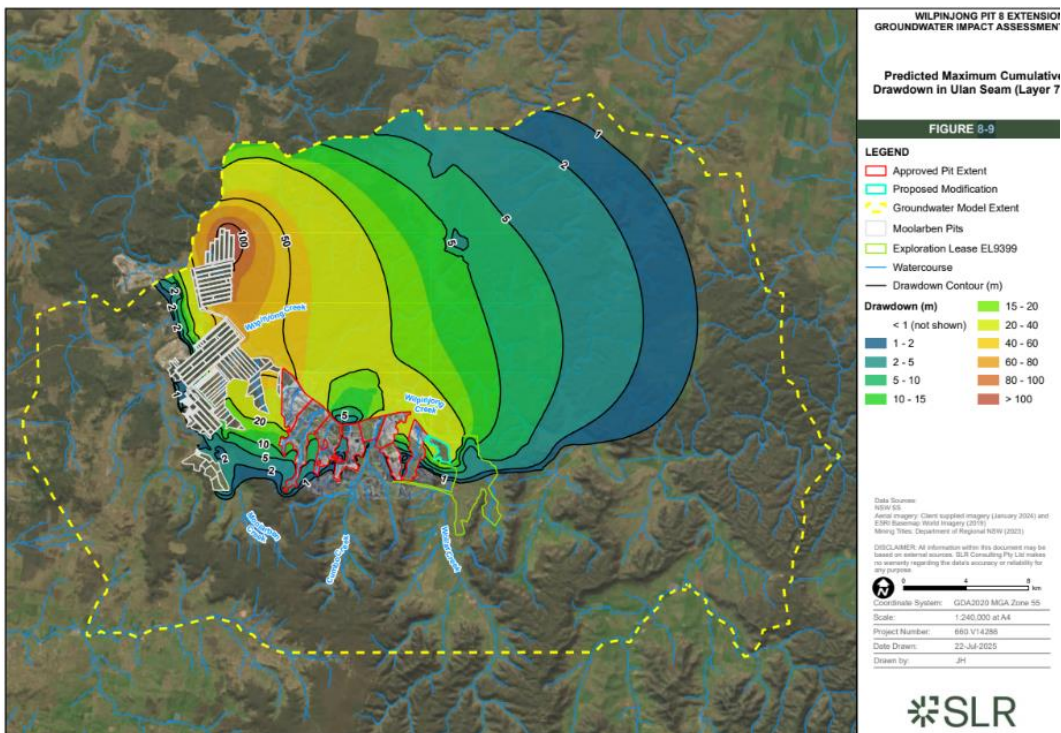


Figure 4 Extract from the Groundwater Impact Assessment showing that maximum cumulative drawdown will be to the east, west, and north of the Pit 8 Extension area.

Recommendation:

- 13.1 Install a ground water monitoring location downstream of Wollar Creek to validate predictions from the groundwater impact assessment and its contribution to cumulative groundwater drawdown.

14. The proposed enhancement conservation area C should be increased

Figure ES-3 of the modification report depicts the layout of Wilpinjong Mine, including enhancement conservation areas A-E. NPWS support the establishment of enhancement conservation areas B, C and E which act as buffers to adjoining NPWS managed lands.

NPWS note that enhancement conservation area C adjoins Munghorn Gap Nature Reserve and contains rock shelters and bat habitat. There are some minor areas of uncleared habitat adjacent to approved pits 1 and 5 that should be incorporated into enhancement conservation area C, as this would create an increased buffer between mining operations and Munghorn Gap Nature Reserve.

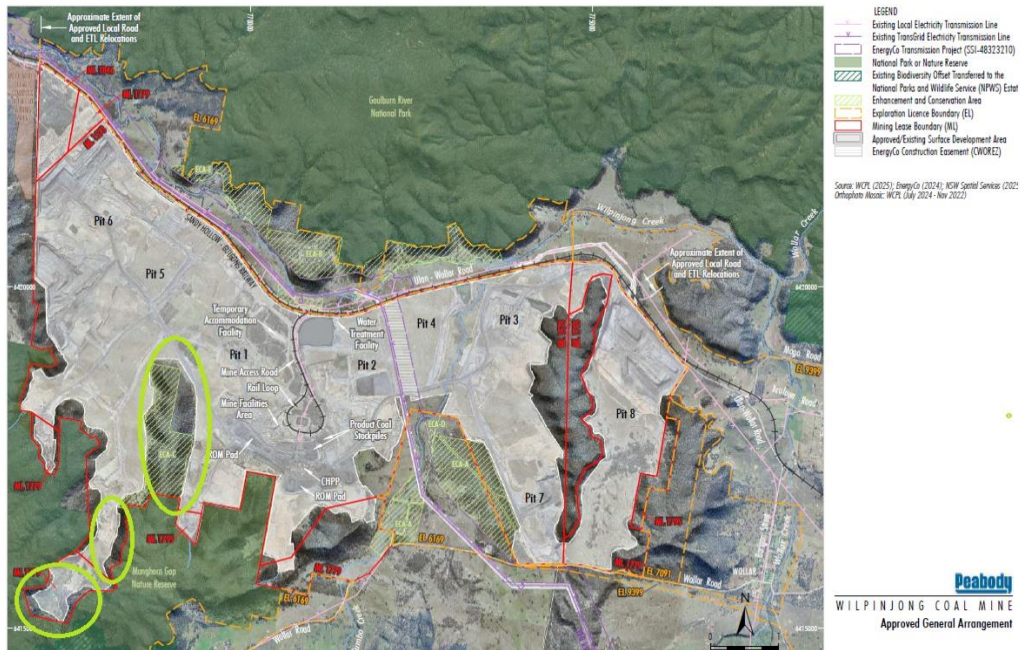


Figure 5 Extract from the modification report, showing uncleared areas where enhancement conservation area C should be increased.

Recommendation:

- 14.1 Increase proposed enhancement conservation area C to be inclusive of adjacent uncleared vegetation as depicted in Figure 5 of this response.