

# EcoResolve



Environment & Design

## Response to Submissions

**Bloomfield BDAR Modification 5 (MP07\_0087)**

**The Bloomfield Group**



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## Document Control

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<b>V2 – 19/08/2025</b>	Addressing comments on Response to Submissions	Alyce Dowling, Julian Carson	Arne Bishop	Arne Bishop

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## Contents

1	<b>Introduction</b> .....	1
2	<b>Study Area</b> .....	1
3	<b>Biodiversity Response to Submissions Summary</b> .....	1
3.1	Required updates for completion.....	1
4	<b>Conclusion</b> .....	1
5	<b>References</b> .....	2

## Appendices

Appendix A	Cessnock City Council (CCC) Issues and Proposed Responses.....	3
Appendix B	Maitland City Council (MCC) Issues and Proposed Responses.....	4
Appendix C	Conservation Programs, Heritage & Regulation Group (CPHR) Issues and Proposed Responses .....	6

## List of Tables

Table 1	Cessnock City Council (CCC) Issues and Proposed Responses .....	3
Table 2	Maitland City Council (MCC) Issues and Proposed Responses .....	4
Table 3	Conservation Programs, Heritage & Regulation Group (CPHR) Issues and Proposed Responses (Flora Species).....	6
Table 4	Conservation Programs, Heritage & Regulation Group (CPHR) Issues and Proposed Responses (Fauna Species) .....	9





# 1 Introduction

EcoResolve was engaged by The Bloomfield Group to prepare a response to submissions (RTS) report documenting the recommended responses to comments received from planning authorities about the Modification 5 (Mod 5) Biodiversity Development Assessment Report (BDAR) for the Bloomfield Colliery Continuation Project (hereafter referred to as the 'Project'). The Project is associated with mining activities at Four Mile Creek, Ashtonfield NSW.

The Conservation Programs, Heritage & Regulation Group (CPHR) of the NSW Department of Climate Change Environment Energy and Water (DCCEE) provided recommendations in response to the BDAR on 10<sup>th</sup> June 2025. Additionally, Cessnock City Council (CCC) and Maitland City Council (MCC) provided recommendations on 20<sup>th</sup> May 2025 and 17<sup>th</sup> June 2025, respectively. EcoResolve has thoroughly reviewed these recommendations and aims to provide an appropriate response in this report.

## 2 Study Area

The Project is associated with the proposed extension of mining activities in two additional areas (The Creek Cut and The Workshop area). These works would expand mining areas by 58.86 hectares (ha) and extend the life of the mine until 31 December 2035 (MP07\_0087-Mod-5).

## 3 Biodiversity Response to Submissions Summary

The response to submissions addresses comments from CCC (**Table 1**), MCC (**Table 2**) and CPHR (**Table 3 & 4**) between current and desired outcomes associated with the existing BDAR (EcoResolve, 2025). Both the comments and EcoResolve's response to them are presented in the appendices to this document. Please note that responses to CCC and MCC comments only address biodiversity and ecological considerations.

### 3.1 Required updates for completion

The updates made to the BDAR as required by the CCC, MCC and CPHR are summarised below:

- BDAR was revised and resubmitted so that it meets the requirements of Section 4.2 of the Biodiversity Assessment Method (BAM) 2020 Operations Manual – Stage 1 (2022).
- Issues regarding incorrect survey timeframes and methods were addressed.
- All relevant spatial data files were supplied for review.
- A broader adaptive management plan was formulated.
- A clearer analysis of indirect, direct and prescribed impacts was included.
- Additional camera trap surveys were conducted and the results reported in the BDAR.

## 4 Conclusion

EcoResolve has responded to the matters raised by the CPHR, CCC and MCC during the public exhibition period. The responses are provided in the appendices below, which demonstrate how the issues raised in submissions have been addressed. These responses support the preparation of the amended BDAR for the Project.





## 5 References

- Department of Planning and Environment (2022) *Threatened Reptiles: Biodiversity Assessment Method Survey Guide*, Environment and Heritage Department of Planning and Environment: Parramatta
- Department of Planning and Environment (2025) *BioNet Atlas of NSW Wildlife*, Accessed July 2025: [http://www.environment.nsw.gov.au/atlaspublicapp/UI\\_Modules/ATLAS\\_/AtlasSearch.aspx](http://www.environment.nsw.gov.au/atlaspublicapp/UI_Modules/ATLAS_/AtlasSearch.aspx)
- EcoResolve (2025) Biodiversity Development Assessment Report Modification 5 (MP07\_0087) for *Bloomfield Colliery, Four Mile Creek NSW*, EcoResolve: Newcastle
- Goldingay, R. & Taylor, B. (2021) "Comparison of spotlighting and trapping in population surveys of the squirrel glider", *Australian Mammalogy*, 44(2) pp. 208-212, CSIRO Publishing
- Gracanin, A. et al. (2022) "Greater glider (*Petauroides volans*) live capture methods", *Australian Mammalogy*, 44, pp. 280-286, CSIRO Publishing
- Milner, R. et al. (2024) "Worm-lizards, ants, and bricks: A low-impact monitoring method for the threatened Pink-tailed Worm-lizard *Aprasia parapulchella*" *Austral Ecology*, 49(2), Australian National University: Canberra, ACT
- Nelson, J. et al. (2018) "Estimating the density of the Greater Glider in the Strathbogie Ranges, North East Victoria", *Arthur Rylah Institute for Environmental Research Technical Report Series No. 293*, Department of Environment, Land, Water and Planning: Heidelberg, Victoria
- Thomas, M. (2020) "Determining the efficacy of camera traps, live capture traps, and detection dogs for locating cryptic small mammal species", *Ecology and Evolution*, 10, pp. 1054-1068



## Appendix A 1 Cessnock City Council (CCC) Issues and Proposed Responses

**Table 1** below summarises the key issues raised by Cessnock City Council (CCC) and provides proposed responses or actions to address each matter. These responses aim to ensure alignment with relevant planning, environmental, and community considerations.

**Table 1 Cessnock City Council (CCC) Issues and Proposed Responses**

Issue	EcoResolve Response
<p><b>Clarification on actual area of proposed clearing</b></p> <p>The submitted Biodiversity Assessment Report (BDAR) states an area of 58.86 ha will be cleared, the EPBC referral states 51.69 ha will be impacted, and the Modification Assessment states the mine will expand by 39 ha.</p>	<p>The 58.86 ha that is stated is the full footprint of clearing activities under the proposed mine expansion.</p> <p>The 51.69 ha that is stated is the area of native vegetation that will be impacted <i>within the 58.86 ha area</i>. The difference in this (7.17 ha) is PCT 0 - an open area with no native ecological value, outlined in Figure 2 of the BDAR (p. 20).</p> <p>The 39 ha stated in the Modification Assessment is due to the different areas used. The 39 ha noted in the Modification Assessment only applies to the proposed additional mining area outside the current approval boundary, while the BDAR <b>includes</b> both the proposed disturbance within the existing Project Approval Boundary and the additional proposed disturbance for the new area.</p>
<p><b>Habitat corridor concerns</b></p> <p>The BDAR submitted does not address important habitat corridors within Cessnock LGA. The vegetation proposed for removal forms part of the Cessnock LGA primary habitat wildlife corridor and vegetation corridor. These corridors provide important ecological benefits to the area that support natural processes within a healthy environment, they allow for species to move through the landscape to find resources such as food, water and nesting habitat. On-going fragmentation of important habitat corridors can negatively impact on local biodiversity by reducing food availability, gene flow and increase edge effects.</p> <p>The proposed removal of approximately 51.69 ha of native vegetation within a significant ecological corridor requires further assessment. The proposed development footprint is situated within a primary wildlife corridor that is connected to the surrounding vegetation and vegetation to the north within Maitland LGA. The corridor forms part of a corridor network as required under the Hunter Regional Plan 2041 and the previously adopted Lower Hunter Regional Conservation Plan. Therefore, the BDAR should take into account the significance of the wildlife corridor/habitat connectivity as required by the Biodiversity Assessment Methodology under the Biodiversity Conservation Act 2016.</p>	<p>EcoResolve recognizes the importance of habitat corridors in supporting local and regional ecosystem function, providing critical habitat constraints and fostering population connectivity. While the habitat corridor as a specific entity has not been addressed the associated values have been taken into consideration throughout the BDAR. Table 12 (p. 66) outlines the indirect impacts that may occur during the construction and operation phase of the Project – these form the genesis of potential habitat corridor decline. Table 18 (p. 75) provides any relevant mitigation measures that address these impacts within the subject land and, by extension, the broader habitat corridor.</p>
<p><b>Hunter Regional Plan 2041</b></p> <p>The Hunter Regional Plan 2041 is a 20-year land-use plan prepared under the Environmental Planning &amp; Assessment Act 1979, it applies to Cessnock LGA. It sets out objectives under a strategic land-use framework. Objective six (6) of the plan sets out to Conserve heritage, landscapes, environmentally sensitive areas, waterways and drinking water catchments.</p> <p>The Hunter Regional Plan identifies the Watagans to Stockton link as an important biodiversity corridor in the region, it is located south of the Bloomfield mine, Bloomfield mine is not mapped under the link, the vegetation within the proposal area however, connects to this significant corridor in the north.</p> <p>Outcomes expected to be achieved include areas of high environmental value are protected to contribute to a sustainable region. Areas of high environmental values have been identified to include; Koala habitat, key habitat for threatened species populations and threatened ecological communities, both of which have been identified to occur in the proposed area in the BDAR reviewed.</p>	<p>It is acknowledged that the development of the open-cut coal mine extension would result in an overall degradation in environmental value and ecological viability within the project footprint during the construction and operation phase of the project. Despite this, Mod 5 works do not encroach upon any important regional or state biodiversity corridors as set out in the Hunter Regional Plan. The important areas and corridors including the Hunter Regional Plan Biodiversity Corridors, Maitland ESS 2030 Biodiversity Corridors and Cessnock Environmental Lands Study 40 m Riparian Zone Buffer do not overlap or come within proximity of the project footprint. Furthermore, future clearing will not indirectly fragment or separate these corridors.</p> <p>Additionally, clearing associated with the Mod 5 development will be incremental and will not result in the adjacent habitat corridor becoming fragmented, as per the BDAR. The clearing of 51.69 ha of native vegetation will be concentrated to the eastern edge of the vegetation corridor and allow the retention of vegetation along the western edge, maintaining ecological function.</p>



## Appendix B Maitland City Council (MCC) Issues and Proposed Responses

The following **Table 2** outlines the issues raised by Maitland City Council (MCC) and the corresponding proposed responses. Each response has been developed to address Council’s concerns while supporting the project’s compliance with applicable planning and environmental requirements.

**Table 2 Maitland City Council (MCC) Issues and Proposed Responses**

Issue	EcoResolve Response
<p><b>Proposed impacts to biodiversity have poor alignment with Hunter Regional Plan 2041</b></p> <p>Objective 6 of the Hunter Regional Plan (HRP) 2041 focuses on the conservation of environmentally sensitive areas. The associated performance outcomes emphasise the protection of High Environmental Value (HEV) areas (refer to Figure 1 below) and require that development maintains or enhances the environmental value and ecological viability of the regional biodiversity network. The proposal involves the clearing of approximately 51.69 hectares of native vegetation, a significant portion of which is mapped as HEV under the Plan and is likely to result in additional indirect impacts on adjacent land. Consequently, the proposal is inconsistent with the intent and objectives of the HRP 2041.</p>	<p>It is acknowledged that the development of the open-cut coal mine extension would result in an overall degradation in environmental value and ecological viability within the project footprint during the construction and operation phase of the project. However, it is also true that a significant portion of the project area (51.69 ha) is classified on the HEV map as the BC Act-listed TEC Lower Hunter Spotted Gum-Ironbark Forest in the Sydney Basin Bioregion and EPBC Act listed TEC Hunter Valley Remnant Woodlands and Open Forests. After ground truthing the Project area, EcoResolve found the vegetation to be commensurate with the BC Act-listed TEC but not the EPBC Act-listed TEC.</p> <p>The BDAR has been produced in accordance with the BAM (2020) which is underpinned by the ‘no net loss principle. This principle is achieved by offsetting the biodiversity clearing associated with the TEC through the provision of 1,796 Ecosystem credits. This principle is believed to be in keeping with HRP 2041 because through ‘no net loss’ the development will maintain or enhance the environmental value and ecological viability of the regional biodiversity network.</p> <p>Furthermore, the Mod 5 works do not align with any areas of high biodiversity value according to the NSW Biodiversity Values Map nor do they encroach upon important regional or state biodiversity corridors as set out in the Hunter Regional Plan. The important areas and corridors including the Hunter Regional Plan Biodiversity Corridors, Maitland ESS 2030 Biodiversity Corridors and Cessnock Environmental Lands Study 40 m Riparian Zone Buffer do not overlap or come within proximity of the project footprint. Furthermore, future clearing will not indirectly fragment or separate these corridors.</p> <p>Additionally, clearing associated with the Mod 5 development will be incremental and will not result in the adjacent habitat corridor becoming fragmented, as per the BDAR. The clearing of 51.69 ha of native vegetation will be concentrated to the eastern edge of the vegetation corridor and allow the retention of vegetation along the western edge, maintaining ecological function.</p>
<p><b>Biodiversity Development Assessment Report (BDAR) not prepared in accordance with the Biodiversity Assessment Method (BAM) 2020</b></p> <p>The BDAR does not adequately demonstrate how impacts on biodiversity values have been avoided and minimised. Under the BAM, assessors are required to clearly demonstrate and document avoid and minimise measures, including an evaluation of feasible alternatives, spatial identification of areas avoided, and supporting analyses, data, and justifications for the decisions made. Aside from a single sentence noting the siting of the project within "previously disturbed areas" and the use of the existing road network, the BDAR lacks any substantive analysis or documentation addressing how impacts have been avoided or minimised in accordance with the mitigation hierarchy. This deficiency is of particular concern given the extent of impacts on native vegetation and threatened species habitat.</p> <p>The assessment of indirect impacts concludes that there is an “almost certain” loss of habitat viability in the surrounding landscape due to edge effects. Additional indirect impacts, such as light and noise spill, are also likely to exacerbate the degradation of habitat viability adjacent to the Subject Site. However, the proposal does not identify or commit to any mitigation measures capable of effectively addressing these impacts. In accordance with Section 8.6 of the BAM, these indirect impacts should be offset through the retirement of biodiversity credits, if adequate mitigation measures cannot be implemented.</p> <p>The BDAR proposes an adaptive management strategy to mitigate project impacts on native fauna and includes details regarding fauna monitoring. However, it does not provide any information on specific management responses or corrective actions that would be implemented in the event that monitoring identifies adverse impacts. In accordance with Section 8.5 of the BAM, an adaptive management plan must include, among other components, clearly defined thresholds or triggers that indicate when an impact has occurred or is likely to occur, along with a range of potential adaptive management actions to be implemented in response. Without the provision of such detail, the proposed adaptive management strategy does not meet the requirements set out in the BAM and is therefore considered inadequate.</p>	<p>The BDAR has been updated with a complete table of mitigation measures addressing the listed direct, indirect and prescribed impacts and their likely efficacy (Table 18).</p> <p>Section 2.1.2 has been updated to better address the issues with allocating an alternative footprint, as identified by the proponent. In summary there are limited opportunities to avoid the impact because the location of the impact is determined by the location of the defined resource.</p> <p>EcoResolve will develop a relevant adaptive management strategy and update into the BDAR accordingly (2.6 Table 18 (Page 76)). Furthermore, a Biodiversity Management Plan (BMP) will be developed post approval, and it will contain further details pertaining to biodiversity management such as adaptive management through a Trigger Action Response Plan (TARP) process.</p>



Issue		EcoResolve Response
	<p>The SAI assessment does not include an evaluation for the large-eared pied bat. As a result, the assessment is considered incomplete and does not address the full range of species that may be subject to serious and irreversible impacts.</p>	<p>The SAI assessment has been updated to include Large-eared Pied Bat (<i>Chalinolobus dwyeri</i>). Section 2.7</p>
	<p>The SAI assessment concludes three SAI-listed bat species (little bent-winged bat, large bent-winged bat and eastern cave bat) are not subject to significant and irreversible impacts, citing the absence of caves—and therefore breeding habitat— within the site. However, Appendix F notes that “the proposed activity involves mining into historic mine shafts.” Historic mine shafts are recognised as potential breeding habitat for all three assessed species, as well as for the large-eared pied bat, which was not included in the assessment. Further investigation is required to determine whether the historic mine shafts potentially affected by the proposal constitute breeding habitat for these species, in accordance with the requirements of the BAM and relevant species habitat guidelines.</p>	<p>Incorrect statements were made in Appendix F regarding the presence of historic mine shafts on the subject land. The BDAR has been revised and updated to reflect the absence of habitat constraints for bat species.</p> <p>There are no known open mine shafts, adits or portals within the Project Area or within the existing Mining Lease. The comment refers to mining of old workings which are currently sealed and therefore are not habitat for any bat species.</p>
<p><b>Inaccuracies in EPBC Act Referral</b></p>	<p>Appendix F - Assessment of the Significance of Impacts on Matters of National Environmental Significance includes an assessment of impacts on large-eared pied bat. This assessment presents several inaccuracies that should be addressed.</p> <p>In the discussion of critical habitat for the species, Appendix F states that “the area likely to be affected by the proposed action contains 21 individuals (Wingbeat Ecology 2024).” However, the data provided by Wingbeat Ecology indicates that 21 calls were detected during acoustic survey efforts—not 21 individual bats. The number of calls recorded is a measure of bat activity and does not provide a reliable estimate of the number of individuals present. As such, this statement misrepresents the data and may lead to an inaccurate interpretation of species presence and abundance in the referral assessment.</p> <p>There is inconsistency in the information regarding the potential impact of the proposal on breeding and roosting habitat for large-eared pied bat. Appendix F initially states that “roosting features for the species are not known to occur within the proposed area”; however, it later acknowledges that “the proposed activity involves mining into historic mine shafts,” and that disused mine shafts are known to be used by the large eared pied bat for both breeding and roosting. This contradiction requires clarification to accurately assess the potential impacts on critical habitat for the species.</p>	<p>Incorrect statements were made in Appendix F regarding both the individual count for Large-eared Pied Bat (<i>Chalinolobus dwyeri</i>) and the presence of historic mine shafts on the subject land. The BDAR has been revised and updated to reflect these corrections.</p>

## Appendix C Conservation Programs, Heritage & Regulation Group (CPHR) Issues and Proposed Responses

**Table 3** presents the issues raised by the Conservation Programs, Heritage & Regulation Group (CPHR) in relation to flora species. Proposed responses are provided for each issue to address regulatory expectations and ensure consistency with conservation objectives and threatened species assessment requirements.

**Table 3 Conservation Programs, Heritage & Regulation Group (CPHR) Issues and Proposed Responses (Flora Species)**

Flora Candidate Species					
Species	BDAR Reference	Survey Effort	Species Polygon	Recommendations	EcoResolve Response
<ul style="list-style-type: none"> <li><i>Acacia bynoeana</i> (Bynoe's wattle)</li> <li><i>Angophora inopina</i> (Charmhaven apple)</li> <li><i>Caladenia tessellate</i> (Thick-Lip Spider Orchid)</li> <li><i>Callistemon linearifolius</i> (Netted bottlebrush)</li> <li><i>Cynanchum elegans</i> (White-flowered wax plant)</li> <li><i>Dillwynia tenuifolia</i></li> <li><i>Eucaltpyus pumila</i> (Pokolbin mallee)</li> <li><i>Eucalyptus glaucina</i> (Slaty red gum)</li> <li><i>Eucalyptus parramattensis subs. Decadens</i></li> <li><i>Grevillea parviflora subsp. parviflora</i> (Small-flower grevillea)</li> <li><i>Melaleuca biconvexa</i> (Biconvex paperbark)</li> <li><i>Ozothamnus tessellatus</i></li> <li><i>Persoonia hirsuta</i> (Hairy Geebung)</li> <li><i>Persoonia pauciflora</i> (North Rothbury persoonia)</li> <li><i>Pomaderris brunnea</i> (Brown Pomaderris)</li> <li><i>Prasophyllum sp. Wybong</i></li> <li><i>Pterostylis gibbosa</i> (Illawarra Greenhood)</li> <li><i>Rhizanthella slateri</i> (Eastern Australian underground orchid)</li> <li><i>Rhodomyrtus psidioides</i></li> </ul>	Table 6, Figures 3-8	Numerous species are listed as surveyed on 09/10/2023 - 10/10/2023 and the site appears to be covered once over the two days. It is unclear which species/stratum was surveyed each day.	Not provided	<p>Further information is required to show surveys were conducted in accordance with Section 5 of 'Surveying threatened plants and their habitats – NSW survey guide for the Biodiversity Assessment Method'. Multi-species searches are to be restricted to a maximum of five species in the same stratum (i.e. search for five ground species, five mid-layer species or five canopy species) per traverse.</p> <p>Provide spatial data files for review.</p> <p><i>Spyridium burragorang</i> - project is within Cessnock LGA. Remove the statement that the project is not in Cessnock LGA.</p>	<p>Further survey information is listed below. EcoResolve has revised BDAR with updated information.</p> <p>Non-Candidate Species Removed from BDAR to reduce confusion and improve clarity around survey requirements. Species listed below were determined as unlikely to be present from the LoO and are therefore not a requirement of the BDAR.</p> <ul style="list-style-type: none"> <li><i>Caladenia tessellata</i> (Thick-Lip Spider Orchid)</li> <li><i>Dillwynia tenuifolia</i></li> <li><i>Ozothamnus tessellatus</i></li> <li><i>Persoonia hirsuta</i> (Hairy Geebung)</li> <li><i>Persoonia pauciflora</i> (North Rothbury persoonia)</li> <li><i>Pomaderris brunnea</i> (Brown Pomaderris)</li> <li><i>Prasophyllum sp. Wybong</i></li> <li><i>Pterostylis gibbosa</i> (Illawarra Greenhood)</li> <li><i>Rhizanthella slateri</i> (Eastern Australian underground orchid)</li> <li><i>Rhodomyrtus psidioides</i> (Native guava)</li> </ul> <p><b>03/05/2023 &amp; 13/05/2024 Survey Effort – 5m Transects targeting:</b></p> <ul style="list-style-type: none"> <li><i>Persicaria elatior</i> (Tall Knotweed)</li> </ul> <p><b>03/06/2023 - 06/06/2023 Survey Effort - 5m Transects targeting:</b></p> <ul style="list-style-type: none"> <li><i>Corybas dowlingii</i> (Red Helmet Orchid)</li> <li><i>Angophora inopina</i> (Charmhaven apple)</li> <li><i>Callistemon linearifolius</i> (Netted bottlebrush)</li> <li><i>Eucalyptus glaucina</i> (Slaty red gum)</li> <li><i>Eucalyptus pumila</i> (Pokolbin mallee)</li> <li><i>Spyridium burragorang</i></li> </ul> <p><b>28/08/2023 – 29/08/2023 Survey Effort – 5m Transects targeting:</b></p> <ul style="list-style-type: none"> <li><i>Diuris praecox</i> (Rough Doubletail)</li> <li><i>Euphrasia arguta</i> (Austral Toadflax)</li> <li><i>Grevillea parviflora subsp. Parviflora</i> (Small-flower Grevillea)</li> <li><i>Pomaderris queenslandica</i> (Scant Pomaderris)</li> <li><i>Rutidosis heterogama</i> (Heath wrinklewort)</li> </ul> <p><b>09/10/2023 – 10/10/2023 Survey Effort – 5m Transects</b></p>

Flora Candidate Species					
Species	BDAR Reference	Survey Effort	Species Polygon	Recommendations	EcoResolve Response
<ul style="list-style-type: none"> <li>(Native guava)</li> <li>• <b><i>Pomaderris queenslandica</i></b> (Scant pomaderris)</li> <li>• <b><i>Prostanthera cineolifera</i></b> (Singleton mint bush)</li> <li>• <b><i>Pterostylis chaetophora</i></b></li> <li>• <b><i>Rutidosis heterogama</i></b> (Heath Wrinklewort)</li> <li>• <b><i>Spyridium burragorang</i></b></li> <li>• <b><i>Tetrateca juncea</i></b> (Black-eyed Susan)</li> </ul>					<p><b>targeting:</b></p> <ul style="list-style-type: none"> <li>• <i>Eucalyptus parramattensis</i> subsp. <i>Decadens</i></li> <li>• <i>Prostanthera cineolifera</i> (Singleton Mint Bush)</li> <li>• <i>Pterostylis chaetophora</i></li> <li>• <i>Syzygium paniculatum</i> (Magenta Lilly Pilly)</li> </ul> <p>Please note that all species were surveyed within the monthly guidelines apart from <i>Cynanchum elegans</i> (White-flowered wax plant) which is typically surveyed in November but is easily identified from morphological markers.</p> <p>EcoResolve will provide spatial files and update BDAR as required. BDAR updated with relevant information regarding Cessnock LGA.</p>
<ul style="list-style-type: none"> <li>• <b><i>Cryptostylis hunteriana</i></b> (Leafless tongue orchid)</li> <li>• <b><i>Diuris praecox</i></b> (Rough doubletail)</li> <li>• <b><i>Syzygium paniculatum</i></b> (Magenta lilly pilly)</li> <li>• <b><i>Corybas dowlingii</i></b> (Red Helmet Orchid)</li> </ul>	Table 6, Figures 3-8	Surveys undertaken within the recommended survey period. Survey effort to be confirmed with review of spatial data files. The species is listed as excluded and surveyed in the BDAR, and has been included in Tab 5 'Habitat Suitability: Candidate' in the BAM-C.	Not provided	Provide spatial data files for review.	<p>Species have been reviewed and included.</p> <p>EcoResolve to provide spatial files and update BDAR as required.</p>
<ul style="list-style-type: none"> <li>• <b><i>Euphrasia arguta</i></b></li> <li>• <b><i>Thesium australe</i></b> (Austral Toadflax)</li> </ul>	Table 6, Figures 3-8	Surveys conducted outside of the recommended survey period	Not provided	Provide justification on why the species was surveyed outside the recommended survey period or undertake surveys for the species as per the TBDC. Alternatively, presence can be assumed or provide an expert report as per Section 5.2 of the BAM.	<p>Survey dates were incorrectly stated in the BDAR:</p> <p><i>Thesium australe</i> – Incorrectly reported as surveyed in October and was actually surveyed in November 2023, which is within the appropriate survey period (Nov-March).</p> <p><i>Euphrasia arguta</i> – Incorrectly reported as surveyed in August and was actually surveyed for in November 2023, which is within the appropriate survey period (Nov-March).</p> <p>EcoResolve has updated BDAR with revised dates.</p>
<ul style="list-style-type: none"> <li>• <b><i>Maudia triglochninoides</i></b></li> </ul>	Table 6, Figures 3-8	Aquatic plant included in two-phase grid methodology	Not provided	It is unclear if all suitable habitat was adequately surveyed with the species included in the Two-phase Grid survey methodology for terrestrial species. Further information required to support all suitable habitat was surveyed.	<p><i>M. triglochninoides</i> was surveyed within the correct survey period (surveyed in November, survey period Nov-March). Further, the wet areas were surveyed using 5m transects, which is adequate for this species in this habitat.</p>



<u>Flora Candidate Species</u>					
Species	BDAR Reference	Survey Effort	Species Polygon	Recommendations	EcoResolve Response
<ul style="list-style-type: none"> <li><i>Persicaria elatior</i></li> </ul>	Table 6, Figures 3-8	Targeted aquatic plant survey.	Not provided	<p>It is unclear if all suitable habitat was adequately surveyed.</p> <p>Further information required to support all suitable habitat was surveyed.</p> <p>Provide spatial data files for review.</p>	BDAR revised accordingly and GPS tracks (and GIS shapefile) to be provided to support.

**Table 4** outlines the issues raised by the Conservation Programs, Heritage & Regulation Group (CPHR) regarding fauna species. The proposed responses aim to address these issues in line with relevant guidelines and to support robust assessment of potential impacts on threatened fauna.

**Table 4 Conservation Programs, Heritage & Regulation Group (CPHR) Issues and Proposed Responses (Fauna Species)**

Fauna Candidate Species						
Species	BDAR Reference	Survey Effort	Species Polygon	Recommendations	EcoResolve Response	
<ul style="list-style-type: none"> <li><b>Barking owl</b> (<i>Ninox connivens</i>)</li> </ul>	Tables 6 & 7, Figure 9	Best practice spotlighting and call playback surveys undertaken at the time and during peak breeding season.	Not provided	Provide spatial data files for review.	EcoResolve to provide spatial files for review.	
<ul style="list-style-type: none"> <li><b>Red Goshawk</b> (<i>Erythrotriorchis radiatus</i>)</li> </ul>	Table 6 and Figure 9	Opportunistic (no date)	Not provided	Provide further information/delineate survey effort for diurnal birds in the BDAR and provide spatial data files for review.	BDAR updated to indicate bird surveys that took place. Large mature trees were surveyed during HBT mapping, which this species requires for breeding. Targeted threatened flora searches of canopy species were also conducted on 10/10/2023. Further bird surveys targeting habitat and fly-over observations were conducted during June 2025. EcoResolve to provide HBT mapping spatial files for review.	
<ul style="list-style-type: none"> <li><b>Bar-tailed Godwit</b> (<i>Limosa lapponica baueri</i>)</li> </ul>	Table 6	No survey required. The species is assessed for species credits via the Important Habitat Map in BOAMS. Species excluded due to geographic limitation.	N/A	No further action required	N/A	
<ul style="list-style-type: none"> <li><b>Broad-billed sandpiper</b> (<i>Limicola falcinellus</i>)</li> </ul>	Table 6	No survey required. The species is assessed for species credits via the Important Habitat Map in BOAMS. Species excluded due to geographic limitation.	N/A	No further action required	N/A	
<ul style="list-style-type: none"> <li><b>Broad-headed snake</b> (<i>Hoplocephalus bungaroides</i>)</li> </ul>	Tables 5, 6 & 7, Figure 9	<ol style="list-style-type: none"> <li>It is unclear if 'habitat surveys' as per the 'Threatened reptiles – Biodiversity Assessment Method survey guide' (the guidelines) have been undertaken.</li> <li>Spotlight surveys were undertaken within recommended survey period (23/01/2024 – 25/01/2024). However, only 3 nights of survey are listed when 4 consecutive nights are recommended in guidelines.</li> <li>Spotlight survey effort tracks in Figure 9 do not cover large areas of potential suitable habitat.</li> <li>Funnel trapping was undertaken for the species. This is not a recommended survey method.</li> <li>The BDAR and BAM-C lists this species as excluded however surveys were conducted.</li> </ol>	Not provided	Further information is required to demonstrate adequate survey effort has been undertaken across the entire site as per the TBDC and guidelines for the species. Demonstrate consistency in the BDAR and BAM-C. Spatial data required for review.	The habitat constraint of 'rocky areas' is not present. Consequently, the species should be ruled out on this basis and unticked in the BAM-C. Habitat surveys did not identify the habitat constraint and precautionarily further surveys targeting this and other reptiles also failed to identify the species.	
<ul style="list-style-type: none"> <li><b>Brush-tailed phascogale</b> (<i>Phascogale tapoatafa</i>)</li> </ul>	Tables 6 & 7, Figure 9	<p>Camera trapping was undertaken outside the recommended survey period for 2 weeks (6/11/2023-20/11/2023).</p> <p>TBDC recommends camera trapping for a minimum of 4 weeks between December-June. Figure 9 shows 8 camera traps within the site.</p> <p>It is unclear if the BOS Help Desk was contacted to determine the number and placement of camera traps as per TBDC recommendations.</p>		Further information is required to demonstrate that adequate survey effort has been undertaken across the entire site as per the TBDC and guidelines for the species. Spatial data required for review.	EcoResolve installed a further six arboreal camera traps 24/06/2025 – 07/07/2025. BDAR has been updated to reflect these changes.	
<ul style="list-style-type: none"> <li><b>Brush-tailed rock-wallaby</b> (<i>Petrogale penicillata</i>)</li> </ul>	Tables 6 & 7, Figure 9	<p>Camera trapping undertaken between 6/11/2023 - 20/11/2023.</p> <p>TBDC recommend systematic fecal pellet surveys and time lapse camera surveys can be undertaken all year round.</p> <p>The BDAR and BAM-C list this species is excluded, however surveys were conducted.</p>	Not provided	Spatial data files required for review. Demonstrate consistency in the BDAR and the BAM-C.	The habitat constraint of 'rocky areas' is not present. Consequently, the species has been ruled out on this basis and unticked in the BAM-C. Further, the species has no records in the TBDC within 5km of the project area.	



Fauna Candidate Species					
Species	BDAR Reference	Survey Effort	Species Polygon	Recommendations	EcoResolve Response
<ul style="list-style-type: none"> <li><b>Bush stone-curlew</b> (<i>Burhinus grallarius</i>)</li> </ul>	Table 6 and Figure 9	<p>Opportunistic (no date) Targeted surveys are required, i.e. opportunistic is not considered best practice.</p> <p>TBDC does not recommend a survey method and therefore the best practice survey methods should be applied, e.g. nocturnal surveys and call playback.</p> <p>The BDAR should include information to support best practice methods in the absence of a recommended survey method.</p>	Not provided	<p>Provide further information for novel survey methodologies, e.g. consult the BOS Help Desk or provide peer-reviewed references.</p> <p>Provide spatial data files for review.</p>	<p>EcoResolve has revised the report and included spotlighting as the stated methodology. Moreover, the species has not been recorded by TBDC within the project area.</p> <p>Spatial files will be provided and updated in the BDAR.</p>
<ul style="list-style-type: none"> <li><b>Common planigale</b> (<i>Planigale maculata</i>)</li> </ul>	Tables 6 & 7, Figure 9	<p>Camera trapping was undertaken between 6/11/2023 - 20/11/2023. TBDC does not recommend camera trapping as a recommended survey method.</p> <p>No pitfall trapping was undertaken for the species as recommended in the TBDC, and an expert report has not been provided.</p>	Not provided	<p>Conduct targeted surveys in accordance with the TBDC, assume presence, or obtain an expert report.</p>	<p>Despite TBDC guidelines including only pitfall trapping as the exclusive method for surveying, camera trapping is an additionally suitable approach for surveying the species. Camera trapping has a history of effectively capturing large and small marsupials with minimal disturbance, operating throughout a 24 hr period and has the ability to deploy in a variety of landscapes and weather (Thomas 2020). EcoResolve preferred to deploy camera traps in place of pitfall traps due to both the rocky substrate on site and the above-average rainfall leading to an increased risk of flooding for trapped wildlife.</p> <p>Additionally, there have been no TBDC records of the species within 20 km of the project area.</p>
<ul style="list-style-type: none"> <li><b>Eastern cave bat</b> (<i>Vespadelus troughtoni</i>)</li> </ul>	Table 6 and Figure 9	<p>Anabat deployment undertaken outside of recommended survey period (10/10/2023 – 14/10/2023) however, the species was detected during survey.</p> <p>Unable to comment on the adequacy of the survey effort or the species polygon without the spatial data files.</p>	Yes	<p>Species detected on site as per Table 6.</p> <p>Provide spatial data files for review.</p>	<p>No further surveys are required as the species was detected during survey efforts, despite being outside the specified survey period. Consequently, it was assumed present across all suitable habitat and species polygon drawn.</p> <p>EcoResolve will provide spatial data files for review.</p>
<ul style="list-style-type: none"> <li><b>Eastern osprey</b> (<i>Pandion cristatus</i>)</li> </ul>	Table 6 and Figure 9	<p>Opportunistic (no date)</p> <p>The TBDC recommends surveys for the species should be undertaken between April - November.</p> <p>Unable to comment on the adequacy of the survey effort without the spatial data files.</p> <p>The species is listed as excluded and surveyed in the BDAR, and has been excluded from Tab 5 'Habitat Suitability: Candidate' in the BAM-C.</p>	Not provided	<p>Provide further information/delineate survey effort for diurnal birds in the BDAR and provide spatial data files for review.</p> <p>Demonstrate consistency in the BDAR and the BAM-C</p>	<p>Targeted threatened flora surveys of canopy species and HBT mapping were undertaken on 10/10/2023 across the project area. During these survey efforts stick nest searches were also undertaken. Habitat constraints were identified as present on site.</p> <p>Further bird surveys targeting habitat and fly-over observations were conducted during June 2025.</p> <p>EcoResolve to provide HBT mapping spatial files for review.</p>
<ul style="list-style-type: none"> <li><b>Eastern pygmy-possum</b> (<i>Cercartetus nanus</i>)</li> </ul>	Table 6 and Figure 9	<p>Camera traps were used within the recommended survey period (6/11/2023 - 20/11/2023) however, Figure 9 shows they were not evenly distributed across the entire site.</p> <p>It is unclear if the positioning of the cameras adequately surveyed all suitable habitat for the species within the site.</p>	Not provided	<p>Provide justification for the positioning of cameras within the site and provide spatial data files which clearly delineate the targeted survey effort for this species.</p>	<p>Camera trap installation was undertaken using the knowledge and experience of the ecology team on site. These installations were located in places of preferable foraging and shelter resources, of which only a small concentration were available.</p> <p>As per the flora species list in the BDAR there were no <i>Proteaceae</i> species and only a few larger <i>Myrtaceae</i> species that are a preferred food source for this species, leading to a concentration of camera traps in a small area.</p>
<ul style="list-style-type: none"> <li><b>Gang-gang cockatoo</b> (<i>Callocephalon fimbriatum</i>)</li> </ul>	Table 6 and Figure 9	<p>Opportunistic (no date)</p> <p>Targeted surveys required. 'Opportunistic' is not considered best practice.</p> <p>Unable to confirm if surveys were undertaken within the TBDC recommended survey period, i.e. October- January.</p>	Not provided	<p>Further information required, including spatial data, to demonstrate adequate survey effort has been undertaken as per the TBDC recommendations for the species.</p>	<p>Targeted threatened flora surveys of canopy species and HBT mapping were undertaken simultaneously.</p> <p>EcoResolve to provide HBT mapping spatial files for review.</p>
<ul style="list-style-type: none"> <li><b>Green and golden bell frog</b> (<i>Litoria aurea</i>)</li> </ul>	Tables 6 & 7, Figure 9	<p>Spotlighting and Call Playback undertaken within recommended survey period (23/01/2024 – 25/01/2024). However, only 3 nights of survey conducted when 4 replicates of aural-visual surveys are recommended in '<i>NSW Survey Guide for Threatened Frogs</i>' (the guidelines).</p> <p>It is unclear if all suitable habitat within the site was surveyed.</p>	Not provided	<p>Spatial data of survey effort and suitable habitat required for review.</p> <p>Further information required to justify surveys for 3 replicates only.</p>	<p>Incorrectly reported - BDAR updated to correctly reflect data of 4 nights.</p> <p>Spatial data will be provided and BDAR revised accordingly.</p>





Fauna Candidate Species						
Species	BDAR Reference	Survey Effort	Species Polygon	Recommendations	EcoResolve Response	
<ul style="list-style-type: none"> <li><b>Green-thighed frog</b> (<i>Litoria brevipalmata</i>)</li> </ul>	Tables 6 & 7, Figure 9	<p>Spotlighting and call playback undertaken within recommended survey period (23/01/2024 – 25/01/2024).</p> <p>The TBDC recommends 2 surveys however, it is unclear if Aural-visual surveys were combined with tadpole surveys as recommended in the guidelines.</p>	Not provided	Spatial data files of survey effort and suitable habitat required for review.	BDAR updated to state that tadpole searches were undertaken during spotlighting.	
<ul style="list-style-type: none"> <li><b>Grey-headed flying-fox</b> (<i>Pteropus poliocephalus</i>)</li> </ul>	Tables 6 & 7, Figure 9	<p>Day time camp survey and opportunistic on (09/10/2023 - 10/10/2023) &amp; (27/11/2023 – 29/11/2023).</p> <p>The species is listed as excluded and surveyed in the BDAR, and has been excluded from Tab 5 'Habitat Suitability: Candidate' in the BAM-C.</p>	Not provided	Provide spatial data files for review. Demonstrate consistency in the BDAR and the BAM-C	BDAR updated to remove mentions of being excluded, including Table 5. Surveys were undertaken to search for camps as suitable habitat is present on site.	
<ul style="list-style-type: none"> <li><b>Koala</b> (<i>Phascolarctos cinereus</i>)</li> </ul>	Tables 6 & 7, Figure 9	<p>SAT and spotlighting undertaken during 30/08/2023 &amp; 23/01/2024 – 24/01/2024.</p> <p>It is noted that although surveys were undertaken the species has been assumed present.</p>	Yes	No further action required.	<p>No further action is required.</p> <p>Due to the proximity to recent records, assuming presence is considered appropriate. Are CPHR recommending that this species could be removed?</p>	
<ul style="list-style-type: none"> <li><b>Large bent-winged bat</b> (<i>Miniopterus oriana oceanensis</i>)</li> </ul>	Tables 6 & 7, Figure 9	<ol style="list-style-type: none"> <li>Anabat deployment undertaken outside of recommended survey period (10/10/2023 – 14/10/2023) however, the species was detected during survey.</li> <li>Unable to comment on the adequacy of the survey effort or the species polygon without the spatial data files</li> <li>The species is listed as excluded and surveyed in the BDAR, and has been excluded from Tab 5 'Habitat Suitability: Candidate' in the BAM-C.</li> </ol>	Yes	Species detected on site as per Table 6. Provide spatial data files for review. Demonstrate consistency in the BDAR and the BAM-C	<p>Despite Anabats being deployed in October and recording the species, there are no habitat constraints on site resulting in no further assessment. They are a dual credit species, and they will still generate ecosystem credits accordingly.</p> <p>EcoResolve to provide spatial files for review.</p>	
<ul style="list-style-type: none"> <li><b>Large-eared pied bat</b> (<i>Chalinolobus dwyeri</i>)</li> </ul>	Table 6 and Figure 9	<ol style="list-style-type: none"> <li>Anabat deployment undertaken outside of recommended survey period (10/10/2023 – 14/10/2023) however, the species was detected during survey.</li> <li>Unable to comment on the adequacy of the survey effort or the species polygon without the spatial data files.</li> <li>The species is listed as excluded and surveyed in the BDAR however, it has been included for assessment in the BAM-C generating credits.</li> </ol>	Yes	Species detected on site as per Table 6. Provide spatial data files for review. Demonstrate consistency between the BDAR and the BAM-C	<p>This species is retained for further assessment in the BDAR and BAM-C consistently now.</p> <p>EcoResolve to provide spatial files for review.</p>	
<ul style="list-style-type: none"> <li><b>Little bent-winged bat</b> (<i>Miniopterus australis</i>)</li> </ul>	Tables 6 & 7, Figure 9	<p>Anabat deployment undertaken outside of recommended survey period (10/10/2023 – 14/10/2023) however, the species was detected during survey.</p> <p>CPHR is unable to comment on the adequacy of the survey effort or the species polygon without the spatial data files.</p> <p>The species is listed as excluded and surveyed in the BDAR, and has been excluded from Tab 5 'Habitat Suitability: Candidate' in the BAM-C.</p>	Yes	Species detected on site as per Table 6. Provide spatial data files for review. Demonstrate consistency in the BDAR and the BAM-C	<p>Anabats were deployed in October and species recorded despite recommended survey period stated as between Dec-Feb. Further, habitat constraints (Caves; Cave, tunnel, mine, culvert or other structure known or suspected to be used for breeding) were not present. BDAR and BAM-C have been adjusted to reflect this.</p> <p>EcoResolve to provide spatial files for review.</p>	
<ul style="list-style-type: none"> <li><b>Little eagle</b> (<i>Hieraaetus morphnoides</i>)</li> </ul>	Table 6 and Figure 9	<p>Opportunistic (no date)</p> <ol style="list-style-type: none"> <li>Targeted surveys required. 'Opportunistic' is not considered to be best practice. Unable to confirm if surveys were undertaken within the TBDC recommended survey period, i.e. August - October.</li> <li>The species is listed as excluded and surveyed in the BDAR, and has been included in Tab 5 'Habitat Suitability: Candidate' in the BAM-C.</li> </ol>	Not provided	Provide further information/delineate survey effort for diurnal birds in the BDAR and provide spatial data. Demonstrate consistency between the BDAR and the BAM-C	<p>Targeted threatened flora surveys of canopy species and HBT mapping were undertaken on 10/10/2023 across the project area. During these survey efforts stick nest searches were also undertaken. Habitat constraints were identified as present on site.</p> <p>Further bird surveys targeting habitat and fly-over observations were conducted during June 2025.</p> <p>EcoResolve to provide HBT mapping spatial files for review.</p>	
<ul style="list-style-type: none"> <li><b>Mahony's toadlet</b></li> </ul>	Tables 6 & 7,	Spotlighting and Call Playback undertaken within recommended survey period	Not	Spatial data of survey effort and suitable habitat	Incorrectly reported – EcoResolve has updated BDAR to correctly reflect	



Fauna Candidate Species					
Species	BDAR Reference	Survey Effort	Species Polygon	Recommendations	EcoResolve Response
<i>(Uperoleia mahonyi)</i>	Figure 9	(23/01/2024 – 25/01/2024). However, only 3 survey nights were recorded when 4 replicates of aural-visual surveys are recommended in the guidelines.  It is unclear if all suitable habitat within the site was surveyed.	provided	required for review. Further information required to justify surveys for 3 replicates only.	data of 4 nights. Spatial data will be sent to show this.
• <b>Masked owl</b> ( <i>Tyto novaehollandiae</i> )	Tables 6 & 7, Figure 9	Best practice spotlighting and call playback surveys were undertaken at the time and during peak breeding season	Not provided	Provide spatial data files for review.	EcoResolve to provide spatial files for review.
• <b>Pale-headed snake</b> ( <i>Hoplocephalus bitorquatus</i> )	Tables 6 & 7, Figure 9	1. Spotlighting undertaken within survey period (23/01/2024 – 25/01/2024). Only 3 nights when 4 replicates recommended in guidelines. Survey effort tracks in Figure 9 do not cover large areas of potential suitable habitat.  2. Funnel trap surveys undertaken within the recommended survey period over 4 nights (6/11/2023 - 10/11/2023). Not all checks are done in the 'morning and evening' as per guidelines. Trap check tracks absent in Figure 9. It is unclear if traps are set out as per guidelines, e.g. 'Set 3 pitfall trap lines, each consisting of 6 traps spaced 3m apart on a 15m line transect. Pitfall trap lines should be placed a minimum of 250 m apart to provide spatial separation and be set to cover variability in each PCT being targeted for survey'	Not provided	Further information required to demonstrate adequate survey effort has been undertaken across the entire site as per the TBDC guidelines for the species. Spatial data required for review.	Dates were incorrectly entered for spotlighting – correct dates were 4 nights between 22/01/2024 & 25/01/2024. While spatial data identifies that survey transects were largely undertaken along a disused roadway, EcoResolve emphasise that areas of important habitat and foraging were prioritized.  In regard to survey methodology, guidelines state "set funnel traps in suitable habitat for 4 night [and] check traps twice daily, in the mornings and evenings" (DPE 2022) as well as undertaking spotlighting transects. There are no references to pitfall trapping being a suitable or preferable survey method. Furthermore, data on 'Survey123' outlines the timelines of morning and night trap checks – this has been included in the BDAR revision.
• <b>Parma Wallaby</b> ( <i>Notamacropus parma</i> )	Tables 6 & 7, Figure 9	1. Camera trapping undertaken within the recommended survey period however the TBDC does not provide a survey method for this species. The BDAR is lacking evidence to suggest that camera trapping is currently the best practice for the species. It is unclear if consultation with the BOS Help Desk has occurred for the species.  2. This species has been listed as surveyed but is not listed within the BAM-C.	Not provided	Provide further information for novel survey methodologies, i.e. consult the BOS Help Desk or provide peer-reviewed references.	EcoResolve has input section 1.6.3.1 into the BDAR that outlines, with references, the suitability of the camera trapping survey method for this species. The BAM-C has been updated and the species added manually. Further, this species was included precautionarily and is not part of the candidate species list. No TBDC records were found within 10 kms of the project area.
• <b>Pink-tailed legless lizard</b> ( <i>Aprasia parapulchella</i> )	Tables 6 & 7, Figure 9	Artificial covers used (16/10/2023 – 4/12/2023) which is not a recommended survey method with the guidelines.	Not provided	TBDC recommends that this species is assessed by expert report due to difficulty in detecting with confidence via survey.	This species is unlikely to occur on the basis that there is no suitable rocky habitat and a paucity of records – zero records within 20 kms of the project area (DPE 2025). Works were conducted from October to December 2023 under the pretext of suitable methodologies, after which the species guidelines changed in February 2024 to preferring an Expert Report. Further, recent scientific literature suggests that artificial shelter surveys for <i>Aprasia parapulchella</i> achieved similar detection rates to rock-turning surveys, provided similar habitat attributes as natural habitat rocks as well as mitigating the disturbance to the species (Milner et al. 2024).
• <b>Powerful owl</b> ( <i>Ninox strenua</i> )	Tables 6 & 7, Figure 9	Best practice spotlighting and call playback surveys were undertaken at the time and during peak breeding season.	Not provided	Provide spatial data files for review.	EcoResolve will provide spatial data files for review.
• <b>South-eastern Glossy Black-Cockatoo</b> ( <i>Calyptorhynchus lathami lathami</i> )	Table 6 and Figure 9	Opportunistic & Camera Trap  21 Camera Traps, 29 Trap nights on all potential nest hollows Surveys undertaken within recommended period: 16/07/2024 – 15/08/2024  The TBDC does not recognize camera trapping of nest hollows as an approved method for this species. The BDAR could be supported by photographs of the survey effort.	Not provided	Further information required to demonstrate adequate survey effort has been undertaken across the entire site as per the TBDC guidelines for the species. Provide spatial data to support adequate habitat survey effort and potential breeding sites (i.e. locations of suitable hollow bearing trees). OR – Spatial data required for review	BDAR updated with photos from survey effort and method of camera traps on hollows.  EcoResolve will provide spatial data files for review.

Fauna Candidate Species					
Species	BDAR Reference	Survey Effort	Species Polygon	Recommendations	EcoResolve Response
<ul style="list-style-type: none"> <li><b>Sooty owl</b> (<i>Tyto tenebricosa</i>)</li> </ul>	Tables 6 & 7, Figure 9	Spotlighting and call playback surveys were undertaken during peak breeding season.  However, only two nights of nocturnal survey were conducted.	Not provided	Provide justification on reduced survey effort compared to the other target forest owl species and provide spatial data files for review.	Incorrectly reported BDAR updated and EcoResolve to send spatial files.
<ul style="list-style-type: none"> <li><b>Southern greater glider</b> (<i>Petauroides volans</i>)</li> </ul>	Tables 6 & 7, Figure 9	Spotlighting (28/08/2023 - 30/08/2023)  The TBDC states that surveys can occur all year round but does not provide a proposed survey method. The BDAR should include a justification for the survey method used including confirmation from the BOS Help Desk or published literature.	Not provided	Provide justification of survey method used and spatial data files for review.	Spotlighting of nocturnal arboreal species is a common survey method that allows for opportunistic observations with minimal disturbance to the target species. While it may not have the detection rate of methods such as tree climbing or thermal cameras it is the most adequate and practical when undertaken over the large project area (Gracanin et al. 2021; Nelson et al. 2018).  EcoResolve will also provide spatial data files.
<ul style="list-style-type: none"> <li><b>Southern myotis</b> (<i>Myotis macropus</i>)</li> </ul>	Tables 6 & 7, Figure 9	Anabat deployment undertaken within recommended survey period and species was detected (10/10/2023 – 14/10/2023)	Yes	Species detected on site as per Table 6. Provide spatial data files for review.	EcoResolve to provide spatial files for review.
<ul style="list-style-type: none"> <li><b>Square-tailed kite</b> (<i>Lophoictinia isura</i>)</li> </ul>	Table 6 and Figure 9	Opportunistic (no date)  The TBDC advises that assessors must undertake a species survey using best practice methods that can be replicated for repeat surveys as per BAM requirements. The recommended survey period is September – January.	Not provided	Provide further information/delineate survey effort for diurnal birds in report and provide spatial data.	Targeted threatened flora surveys of canopy species and HBT mapping were undertaken on 10/10/2023 across the project area. During this survey effort roosting habitat and stick nest searches were also undertaken. Habitat constraints were identified as present on site.  Further bird surveys targeting habitat and fly-over observations were conducted during June 2025.  EcoResolve to provide HBT mapping spatial files for review.
<ul style="list-style-type: none"> <li><b>Squirrel glider</b> (<i>Petaurus norfolcensis</i>)</li> </ul>	Tables 6 & 7, Figure 9	Spotlighting and Call Playback conducted 28/08/2023 - 30/08/2023.  It is noted that although surveys were undertaken the species has been assumed present.	Yes	Provide justification of survey method used and spatial data files for review of the species polygon.	Spotlighting of nocturnal arboreal species is a common survey method that allows for opportunistic observations with minimal disturbance to the target species. While it may not have the detection rate of methods such as tree climbing or thermal cameras it is the most adequate and practical when undertaken over the large project area (Goldingay 2021)  Additionally, this species is still assumed to be present because it is appropriate to adopt the precautionary principle in the absence of scientific certainty determining that they are not present.  EcoResolve will provide spatial data for review.
<ul style="list-style-type: none"> <li><b>Stephens' banded snake</b> (<i>Hoplocephalus stephensii</i>)</li> </ul>	Tables 6 & 7, Figure 9	Spotlighting and nocturnal road surveys undertaken within the recommended survey period (23/01/2024 – 25/01/2024).  Only 3 nights when 4 replicates recommended in guidelines. Survey effort tracks in Figure 9 do not cover large areas of potential suitable habitat.	Not provided	Further information required to demonstrate adequate survey effort has been undertaken across the entire site as per the TBDC guidelines for the species. Spatial data required for review.	Survey dates were incorrectly entered into BDAR, correct dates were 22/01/2025 to 25/01/2025. This timeline covers the recommended survey duration in the guidelines.  While spatial data identifies that survey transects were largely undertaken along a disused roadway, EcoResolve emphasises that areas of important habitat and foraging were prioritized.

**Fauna Candidate Species**

Species	BDAR Reference	Survey Effort	Species Polygon	Recommendations	EcoResolve Response
<ul style="list-style-type: none"> <li>• <b>Striped legless lizard</b> (<i>Delmar impar</i>)</li> <li>• <b>Hunter Valley Delma</b> (<i>Delma vascolineata</i>)</li> </ul>	Tables 6 & 7, Figure 9	Artificial cover survey undertaken within recommended survey period (16/10/2023 – 4/12/2023). It is unclear if the artificial covers were in place for a month prior to the first check on 16/10/2023. It appears surveys were conducted for 8 weeks only when surveys are recommended for 10 weeks.	Not provided	Provide further information on how survey effort for the species meets the TBDC including spatial data files for review.	EcoResolve undertook artificial cover surveys in October and December 2023 during which the survey guidelines stated that survey replicates were weekly for 8 weeks (DPE 2022). Since these survey efforts there has been a revision to the survey guidelines in 2024 for <i>Delma impar</i> and <i>D. vascolineata</i> that has expanded the survey period to 10 weeks (DPE 2025).
<ul style="list-style-type: none"> <li>• <b>Swift Parrot</b> (<i>Lathamus discolor</i>)</li> </ul>	Table 6	Assumed present. No survey required. The species is assessed for species credits via the Important Habitat Map in BOAMS.	Yes	Spatial data required for review of IHM within the development footprint.	Spatial data will be provided by EcoResolve so that IHM mapping can be confirmed.
<ul style="list-style-type: none"> <li>• <b>Wallum froglet</b> (<i>Crinia tinnula</i>)</li> </ul>	Tables 6 & 7, Figure 9	Spotlighting and Call Playback undertaken within recommended survey period (23/01/2024 – 25/01/2024). However, only 3 survey nights recorded when 4 replicates of aural-visual surveys are recommended in the guidelines.  It is unclear if all suitable habitat within the site was surveyed.	Not provided	Spatial data of survey effort and suitable habitat required for review.	EcoResolve to provide spatial data files and suitable habitat records  Incorrectly reported - BDAR updated to correctly reflect data of 4 nights.
<ul style="list-style-type: none"> <li>• <b>White-bellied sea-eagle</b> (<i>Haliaeetus leucogaster</i>)</li> </ul>	Table 6 and Figure 9	Opportunistic (no date)  Targeted surveys required. 'Opportunistic' is not considered to be best practice. Unable to confirm if surveys were undertaken within the TBDC recommended guidelines and survey period, i.e. July - December.	Not provided	Provide further information/delineate survey effort for diurnal birds in the BDAR and spatial data.	Targeted threatened flora surveys of canopy species and HBT mapping were undertaken on 10/10/2023 across the project area. During this survey effort roosting habitat and stick nest searches were also undertaken. Habitat constraints of "living or dead mature trees within suitable vegetation within 1km of a rivers, lakes, large dams or creeks, wetlands and coastlines" (DPE 2025) were identified although no presence of individuals or breeding was observed.  Further bird surveys targeting habitat and fly-over observations were conducted during June 2025.  EcoResolve to provide HBT mapping spatial files for review.