



Department of Planning, Housing and Infrastructure
Locked Bag 5022
PARAMATTA NSW 2150

Attention: Mr Benjamin Cox

Dear Mr Cox

RE: Clarrie Hall Dam Wall Raising EIS – Assessment of Matters of National Environmental Significance (SSI-65020460)

Thank you for your referral via the Major Projects Planning Portal dated 26 September 2024 seeking advice from the Biodiversity, Conservation and Science Group (BCS) of the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW), on Matters of Environmental Significance (MNES) listed on the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

We have reviewed the Biodiversity Development Assessment Report and the Environmental Impact Statement for this project and have identified several issues with the MNES assessment. Our detailed review is provided in **Attachment 1** to this letter.

In summary, BCS recommends:

1. Figure 1.2 of the BDAR and equivalent GIS shapefile be revised to show the disturbance footprint and clearing boundaries for the proposed realignment of Clarrie Hall Dam Road.
2. The species polygon for the pouched frog be revised to encompass all records of the species on the subject land.
3. The species polygon for the giant barred frog be extended to include all plant community types (PCTs) associated with the species within 50 m of the aquatic habitat directly linked to the species records, noting the 50 m buffer is to be applied to the aquatic habitat rather than the species records.
4. The BDAR be revised to include a comparative analysis of potential biodiversity impact inflection points for a range of dam wall heights between the existing wall height of 61.5 m AHD and the proposed 70 m AHD wall height.
5. The BDAR be revised to include a comparative analysis of potential alternative rock sources and their biodiversity impacts to justify reinstating the existing rock quarry on the subject land.
6. If the analysis of alternative rock sources and their biodiversity impacts concludes reinstatement of the existing rock quarry is justified, then the proponent investigate opportunities to further refine the proposed rock quarry footprint to avoid as many threatened species and their habitat as possible, particularly slender marsdenia and scrub turpentine.

7. Haul road option 2 be adopted as part of the project design to minimise direct and indirect biodiversity impacts.
8. The project development footprint around the rock quarry haul road, new spillway and realigned Clarrie Hall Dam Road be further refined and detailed in the BDAR to avoid biodiversity impacts.
9. Dam water levels be increased incrementally to cater for short-term projected increases in community water demand rather than immediately filling the upgraded dam to the 42,300 ML FSL, with consideration given to staging the retirement of biodiversity credits to accord with the impacts of each incremental increase in dam water level.
10. The quantum of direct impact values for EPBC Act listed threatened species in the BDAR and biodiversity assessment method calculator (BAM-C) be thoroughly reviewed to identify and resolve all discrepancies.

If you have any further questions about these issues or recommendations, please contact Mr Dimitri Young, Senior Team Leader Planning North East, BCS, on 6659 8272 or at dimitri.young@environment.nsw.gov.au.

Yours sincerely



GABRIELLE PIETRINI
Director North East
Biodiversity, Conservation and Science

4 December 2024

Enclosure: Attachment 1 – Detailed DCCEEW BCS Comments – Clarrie Hall Dam Wall Raising MNES Assessment

Attachment 1: Detailed DCCEEW BCS Comments – Clarrie Hall Dam Wall Raising MNES Assessment

TABLE 1: BCS OFFICER PROJECT ADVICE TO DPIE ON EPBC ACT LISTED THREATENED SPECIES AND COMMUNITIES

Requirement	Information	Reference (BAM / BLA ¹)
Background & Description of Action	Does the EIS/BDAR²: ☐ clearly show how operational and construction footprints, including clearing boundaries, structures to be built and elements of the action are situated with regard to MNES ☒ depict stages and timing of the action that may impact on MNES ☒ provide a map(s) of the subject land boundary showing the final proposal/disturbance footprint with respect to location of MNES, including GIS shape files Include references to where this detail is provided. Provide advice on the adequacy of the background and action description with respect to MNES and identify any recommended additional information requirements: The BDAR describes the impacts on MNES in chapter 9 and Appendix H of the BDAR. BCS confirms the BDAR provides an adequate overall description of the background and actions in relation to MNES. However, Figure 1.2 of the BDAR (and equivalent GIS shapefile), which illustrates the components of the proposal, does not show the disturbance footprint or clearing boundaries for the proposed re-alignment of Clarrie Hall Dam Road. Recommended action: - Figure 1.2 of the BDAR and equivalent GIS shapefile be revised to show the disturbance footprint and clearing boundaries for the proposed realignment of Clarrie Hall Dam Road.	BAM Chapters 3, 4, 5 and 8
Landscape Context of the MNES	Provide advice on the adequacy of the landscape context information and identify any additional information requirements: Landscape features are adequately described in chapter 3 of the BDAR. Site location and relevant landscape features are illustrated in Figures 1.1, 1.2, 3.1 and 3.2. BCS considers information provided in the BDAR adequately describes the landscape context of the MNES.	BAM Section 3.1 BLA clause 7.4
EPBC Act Listed Threatened	Verify that the EIS/BDAR includes relevant information on the identification of all EPBC Act listed threatened species and communities on the site or in the vicinity ³ via:	BAM Chapters 4 and 5

¹ Bilateral agreement (BLA) made under section 45 of the EPBC Act, including Amending Agreement No. 1 (2020)

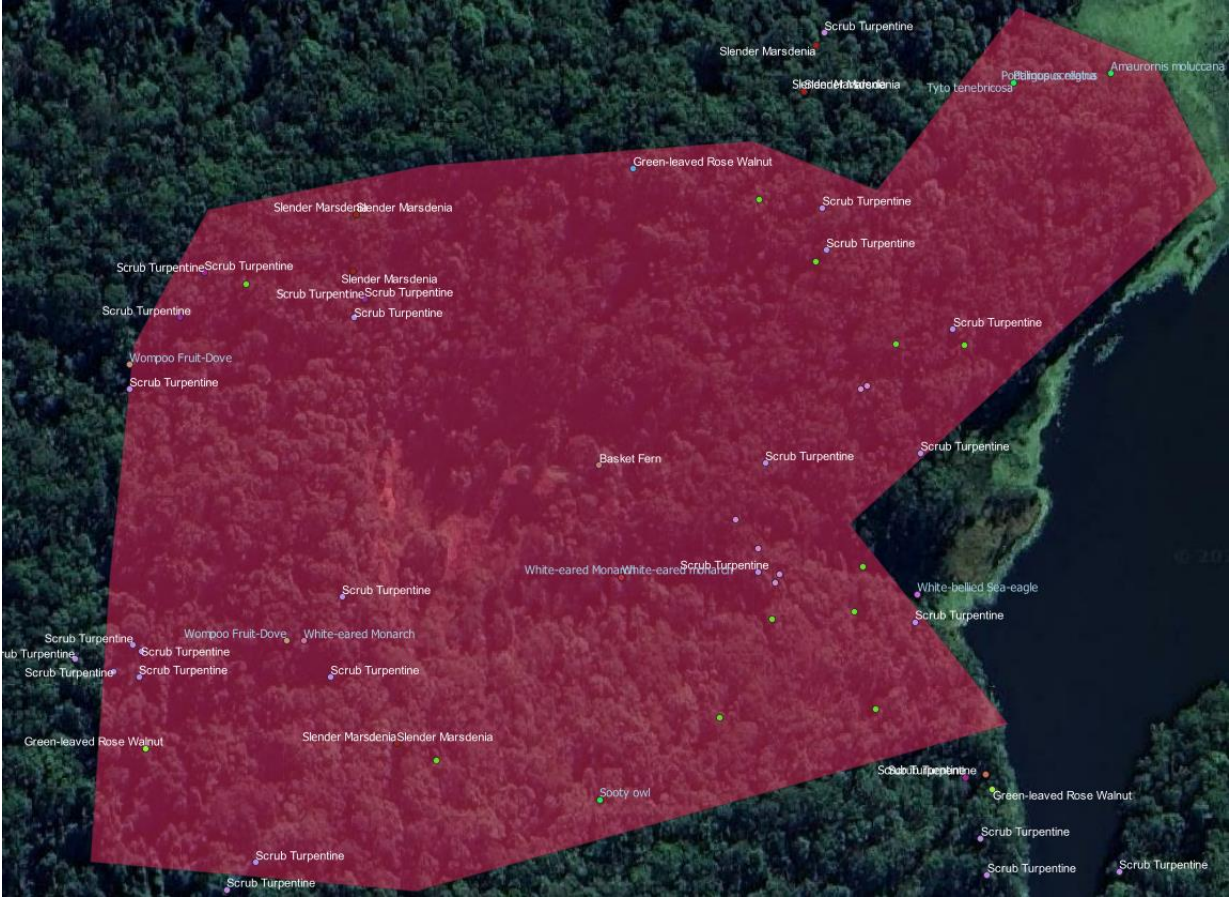
² Or revisions of the BDAR and associated documentation made as a result of previous reviews or project changes post-exhibition.

³ On land to which impacts may extend

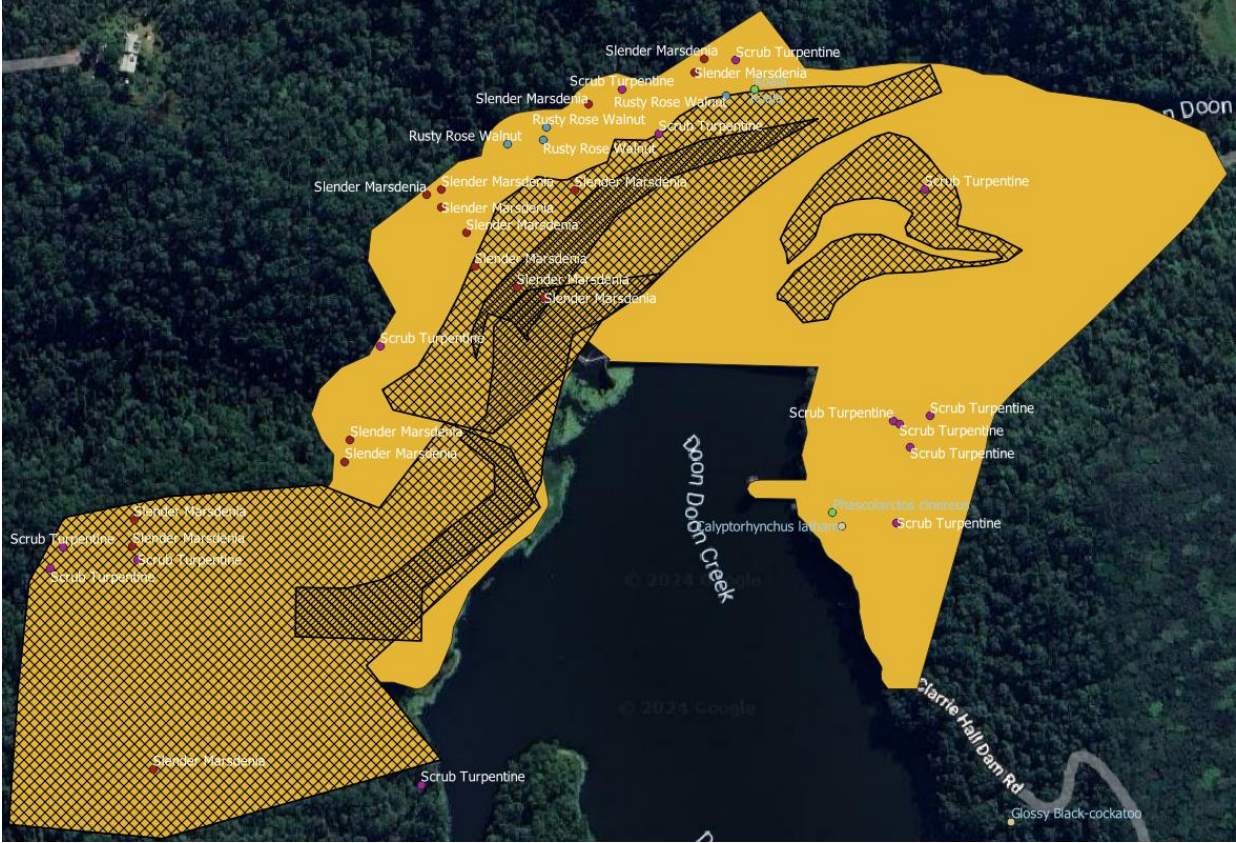
Requirement	Information	Reference (BAM / BLA ¹)
Species & Communities	☒ field based survey effort ☒ published peer reviewed literature ☒ local data ☒ supporting databases (such as the NSW BioNet Vegetation Classification, NSW BioNet Threatened Biodiversity Data Collection, NSW BioNet Atlas, Commonwealth Species Profile and Threats Database search results) ☒ Verify that the EIS/BDAR includes appropriate mapping of all EPBC Act listed threatened species and communities in accordance with the relevant Commonwealth Listing Advice. The EIS/BDAR should include important populations and critical habitat as defined in Approved Listing Advice, Approved Conservation Advice and Recovery Action Plans.	
	Provide advice on the adequacy of the identification methods and mapping information / any additional information requirements: The most northern record of the pouched frog on the subject land is located outside the species polygon, hence the species polygon has not encompassed all areas of suitable habitat for the species on the subject land. Recommended action: 2. The species polygon for the pouched frog be revised to encompass all records of the species on the subject land. The species polygon provided for the giant barred frog in the BDAR does not accord with the requirements detailed in the <i>NSW Survey Guide for Threatened Frogs – A guide for the survey of threatened frogs and their habitats for the BAM</i> (DPIE 2020). Recommended action: 3. The species polygon for the giant barred frog be extended to include all plant community types (PCTs) associated with the species within 50 m of the aquatic habitat directly linked to the species records. Noting the 50 m buffer is to be applied to the aquatic habitat rather than the species records. BCS confirms the identification methods used, and mapping information provided for the remaining EPBC Act threatened entities, is adequate.	

Requirement	Information	Reference (BAM / BLA ¹)
	Confirm that all EPBC Act listed threatened species and communities that occur on the subject land, or in the vicinity, have been identified in the BDAR/EIS including those that are ecosystem credit species. If any species and communities identified in the referral documentation (provided by DAWE) have been ruled out because they don't occur on or near the site, verify that there is robust analysis and justification for why these species can be ruled out. Provide advice on whether there are any other MNES species or communities that are missing from the assessment based on BCS knowledge and experience. BCS confirms all EPBC Act listed threatened entities known or likely to occur either on or close to the subject land have been identified in the BDAR/EIS. Only one threatened species, spotted-tailed quoll (<i>Dasyurus maculatus</i>), identified in the Project Assessment Notes issued by the Australian Government Department of Climate Change Environment and Water has been excluded in the BDAR/EIS. The spotted-tailed quoll was ruled out as potentially occurring on the subject land after field surveys did not detect the species present on site. BCS considers the analysis and reasoning provided in the EIS for excluding the species from further assessment to be justified. Advise whether there is appropriate justification and supporting evidence for the addition and/or exclusion of any EPBC Act listed threatened species and/or communities from the list (if applicable): The assessor has provided appropriate justification and supporting evidence to exclude many of the predicted threatened entities identified in the Protected Matters Search Tool (PMST) results. Threatened entities were appropriately excluded from further assessment based on either a lack of suitable habitat on site, geographic limitations and/or having not been detected on the subject land following targeted survey using methods consistent with the Biodiversity Assessment Method 2020.	
Avoidance, Minimisation, Mitigation & Management	Verify that the EIS/BDAR demonstrates all feasible alternatives and efforts to avoid and minimise impacts on EPBC Act listed threatened species and communities (including direct, indirect and prescribed impacts) including an analysis of alternative: ☐ designs and engineering solutions ☐ modes or technologies ☐ routes and locations of facilities ☒ sites within the subject site ☒ Verify that the EIS/BDAR identifies any other site constraints in determining the location and design of the proposal (such as bushfire protection requirements, flood planning levels, servicing constraints, etc).	BAM Chapters 6, 7 and 8 BLA clause 7.1

Requirement	Information	Reference (BAM / BLA ¹)
	Verify that the EIS/BDAR provides feasible measures to mitigate and/or manage impacts on EPBC Act listed threatened species and communities (including direct, indirect and prescribed impacts) including: ☒ techniques, timing, frequency and responsibility ☒ identify measures for which there is risk of failure ☒ evaluate the risk and consequence of any residual impacts ☒ any adaptive management strategy proposed to monitor and respond to impacts. Provide advice on whether all feasible impact avoidance, minimisation, mitigation and management measures have been considered and are adequately justified: BCS considers more opportunities exist for the proponent to avoid impacts on EPBC Act listed threatened species and their habitats. These opportunities are discussed below: The assessor has demonstrated avoidance of direct impacts for the placement of the concrete batching plant, workforce accommodation and the McCabes Bridge stockpile and construction office complex. The BDAR has also presented limiting the increased height of the dam wall to a full supply level (FSL) of 70 m AHD as a design measure for avoiding biodiversity impacts. The BDAR refers to analysis of biodiversity impact inflection points for FSLs of 66 m, 70 m, 74 m and 77 m. The BDAR details the relative proportion of biodiversity impact for FSLs above 70 m and concludes that limiting the wall height to achieve an FSL of 70 m would avoid biodiversity impacts where possible. Chapter 3 of the concept design report in Appendix B of the EIS noted that FSLs above 70 m would cause significant breakouts, requiring the need for saddle dams at significant cost to the project. Consequently, limiting the FSL at 70 m AHD is not a valid means of avoiding biodiversity impacts because wall heights to achieve higher FSLs were cost prohibitive. Although the BDAR has claimed biodiversity impacts for a wall height at a FSL of 66 m were analysed, the results of the analysis at this height were not presented in the BDAR. Therefore, the BDAR has not included a comparison of biodiversity impacts for wall heights with an FSL below 70 m to demonstrate the adequacy of measures to avoid and minimise biodiversity impacts. Recommended action: 4. The BDAR be revised to include a comparative analysis of potential biodiversity impact inflection points for a range of dam wall heights between the existing wall height of 61.5 m AHD and the proposed 70 m AHD wall height.	

Requirement	Information	Reference (BAM / BLA ¹)
	The proposal involves re-instating a rock quarry on the subject land to source rock for construction of the project. The former rock quarry site contains known habitat for two EPBC Act listed threatened flora species, slender marsdenia (<i>Marsdenia longiloba</i>) and scrub turpentine (<i>Rhodamnia rubescens</i>) (see Figure 1 below). The BDAR has not provided any comparative analysis of alternative rock sources and their biodiversity impacts to demonstrate reinstatement of the rock quarry would have the least biodiversity impacts.  Figure 1: Threatened species records within the proposed rock quarry development footprint.	

Requirement	Information	Reference (BAM / BLA ¹)
	Recommended actions: - The BDAR be revised to include a comparative analysis of potential alternative rock sources and their biodiversity impacts to justify reinstating the existing rock quarry on the subject land. - If the analysis of alternative rock sources and their biodiversity impacts concludes reinstatement of the existing rock quarry is justified, then the proponent investigate opportunities to further refine the proposed rock quarry footprint to avoid as many threatened species and their habitats as possible, particularly slender marsdenia and scrub turpentine. The EIS and BDAR identify two options for the proposed rock quarry haul road route (see Figure 2 below). Haul road option 1 would remove significantly more native vegetation and threatened species habitat and lead to greater long-term edge effects than option 2. Recommended action: - Haul road option 2 be adopted as part of the project design to minimise direct and indirect biodiversity impacts.	

Requirement	Information	Reference (BAM / BLA ¹)
	The mapped construction disturbance area around the dam wall appears to extend well beyond the various construction components of the project, particularly if the haul road option 2 is adopted (see Figure 3 below). Biodiversity credit obligations for EPBC Act listed threatened species calculated in the BAM-C and presented in the BDAR have been based on a broader construction disturbance area, which indicates there may be opportunities for the proponent to further avoid biodiversity impacts by refining and confirming the actual development/clearing footprint.  Figure 3: The construction disturbance footprint (orange) extends well beyond the various components of the dam wall construction (cross hatched area). EPBC Act listed threatened species records are shown as various coloured dots. Note, the development footprint for the proposed realignment of Clarrie Hall Dam Road has not been provided in the BDAR.	

Requirement	Information	Reference (BAM / BLA ¹)
	Recommended action: 8. The project development footprint around the rock quarry haul road, new spillway and realigned Clarrie Hall Dam Road be further refined and detailed in the BDAR to avoid biodiversity impacts. The project involves filling the dam from its current capacity of 16,000 ML to a FSL of 42,300 ML upon completion, resulting in the rapid inundation of an extensive area of threatened species habitat. The much larger FSL resulting from the project is expected to meet community water demands up to and beyond 2065. Presumably, the community water demand will increase progressively in response to population growth, hence the FSL of the upgraded dam is unlikely to be required for several decades. Section 7.2.2 of the BDAR indicates environmental stream flows in Doon Doon Creek downstream of the dam are currently supported by dam releases of 4 ML per day, which suggests the dam operator may have some control over the dam water level. Assuming the dam water level can be monitored and controlled with a reasonable level of precision via dam releases, the proponent could stage incremental increases in the dam water level in response to increasing community water demand over the next 40 years. This would significantly slow the rate of permanent inundation of threatened species habitat and provide much more time for flora and fauna assemblages to adapt and migrate in response to incremental habitat loss. It would also provide significantly more time for proposed mitigation measures involving seed collection and assisted establishment of threatened flora species beyond the future FSL. The retirement of biodiversity credit obligations generated by the project could also be further staged to align with each incremental increase in the dam water level. Recommended action: 9. Dam water levels be increased incrementally to cater for short-term projected increases in community water demand rather than immediately filling the upgraded dam to the 42,300 ML FSL, with consideration given to staging the retirement of biodiversity credits to accord with the impacts of each incremental increase in dam water level.	
Impact Assessment	Verify that the EIS/BDAR: ☑ identifies the residual adverse impacts likely to occur to each EPBC Act listed threatened species and/or community after the proposed avoidance and mitigation measures are taken into account ☑ provides adequate justification and evidence for the predicted level of impact, with reference to the: • Commonwealth's Significant Impact Guideline: https://www.environment.gov.au/system/files/resources/42f84df4-720b-4dcf-b262-48679a3aba58/files/nes-guidelines_1.pdf • DPIE Guidance to Assist a Decision-Maker to Determine a Serious and Irreversible Impact (SAII): (https://www.environment.gov.au/system/files/resources/42f84df4-720b-4dcf-b262-48679a3aba58/files/nes-guidelines_1.pdf)	BAM Chapters 8 and 9 BLA clauses 6.2(b)(i)-(ii) and 7.1

Requirement	Information	Reference (BAM / BLA ¹)
	Complete the following information for each EPBC Act listed threatened species and/or community (add/remove rows as necessary): • EPBC Act listed threatened species and/or community • nature and consequences of impacts (i.e. direct and indirect) • duration of impact (e.g. construction, operation, life of project) • quantum of impact • consequences of impacts on the species, the population and / or extent of the community at local, state and national scales Confirm the level of predicted impact (cross appropriate): ☒ high risk of impact (requiring offsets)[#] or SAIL ☒ Low risk of impact (not requiring offsets) [#] For purposes of EPBC approval, as a minimum, significant adverse residual impacts must be offset (significant impact can be evaluated with reference to the significance impact guidelines) Provide advice on whether adequate justification and evidence is provided for species and communities that have been identified as being at low risk of impact. Chapter 9 of the BDAR includes significant impact assessments for each of the 24 threatened and/or migratory EPBC Act listed threatened entities known or likely to occur on the subject land. The assessments have concluded a significant impact: • unlikely for 7 threatened species • unlikely for 3 migratory species • possible for 3 threatened species • likely for 9 threatened species • likely for one threatened ecological community. BCS has reviewed the significant impact assessments and concurs with the assessment conclusions. The quantum of impacts and offset details for threatened entities considered possible or likely to be significantly impacted by the project are listed in Table 2 below. Table 2 also lists offset obligations generated for several EPBC Act species in accordance with the BAM for which a significant impact under the EPBC Act was considered unlikely. These species include rusty rose walnut, red boppel nut, rough-shelled bush-nut, Southern pink underwing moth and durobby.	

Requirement	Information	Reference (BAM / BLA ¹)																						
Offsets	Verify that the EIS/BDAR: ☐ identifies any MNES that haven't been offset using the BAM ☒ identifies how impacts requiring offsets correlate to MNES impacts ☒ identifies the plant community types (PCTs) requiring offset and the number and type of ecosystem credits required for impacts to MNES ☒ identifies threatened species requiring offset and the number of species credits required for impacts to MNES ☒ correctly uses the BAM (and BAM calculator) to identify the number and class of biodiversity credits that need to be offset to achieve a standard of 'no net loss' of biodiversity ☐ identifies if ecological rehabilitation and/or biodiversity conservation actions are proposed for offsetting ☐ if known, identifies any other offsetting approach proposed, such as land-based offsets, retiring credits by payment into the Biodiversity Conservation Fund and/or through supplementary measures[#]. [#] In accordance the BAM there is no longer a requirement to define the offsetting approach at EIS stage. Complete the Impacts and Offsets Summary table below (Table 2)	BAM Chapter 10 BLA clauses 7.1 and 7.2																						
	Provide advice on the adequacy of the proposed offsets in meeting the requirements of the BAM: For several of the EPBC Act listed threatened species there are discrepancies between the quantum of impacts stated in the significant impact assessment in section 9.1.2 of the BDAR, the summary of impacts detailed in section 7.1.3 of the BDAR and the quantum of impacts used in the biodiversity assessment method calculator (BAM-C) to determine the biodiversity credit offset obligations (refer to Table A). The discrepancies are detailed in the Table A below: Table A: Discrepancies in the predicted quantum of impacts on EPBC Act listed threatened species between sections of the BDAR and the BAM-C. <table><tr><th>EPBC Act threatened species</th><th>Significant impact assessment (BDAR section 9.1.2)</th><th>Summary of impacts (BDAR section 7.1.3)</th><th>BAM-C</th></tr><tr><td>Thorny Pea</td><td>3.3 ha</td><td>2.21 ha</td><td>2.2 ha</td></tr><tr><td>Giant Barred Frog</td><td>6.09 ha</td><td>6.09 ha</td><td>6.03 ha</td></tr><tr><td>Koala</td><td>160.87 ha</td><td>160.87 ha</td><td>159.7 ha</td></tr><tr><td>Southern Pink Underwing Moth</td><td>n/a</td><td>0.10 ha</td><td>0.09 ha</td></tr><tr><td>Grey-headed flying-fox</td><td>62.87 ha</td><td>n/a</td><td>164.5 ha</td></tr></table>		EPBC Act threatened species	Significant impact assessment (BDAR section 9.1.2)	Summary of impacts (BDAR section 7.1.3)	BAM-C	Thorny Pea	3.3 ha	2.21 ha	2.2 ha	Giant Barred Frog	6.09 ha	6.09 ha	6.03 ha	Koala	160.87 ha	160.87 ha	159.7 ha	Southern Pink Underwing Moth	n/a	0.10 ha	0.09 ha	Grey-headed flying-fox	62.87 ha
EPBC Act threatened species	Significant impact assessment (BDAR section 9.1.2)	Summary of impacts (BDAR section 7.1.3)	BAM-C																					
Thorny Pea	3.3 ha	2.21 ha	2.2 ha																					
Giant Barred Frog	6.09 ha	6.09 ha	6.03 ha																					
Koala	160.87 ha	160.87 ha	159.7 ha																					
Southern Pink Underwing Moth	n/a	0.10 ha	0.09 ha																					
Grey-headed flying-fox	62.87 ha	n/a	164.5 ha																					

Requirement	Information				Reference (BAM / BLA ¹)
	Native Guava	97.26 ha	95.53 ha	95.6 ha	
	Durobby	18 individuals	16 individuals	16 individuals	
	The quantum of impacts and required biodiversity offset obligations for all other EPBC Act listed threatened entities impacted by the proposal have been accurately presented in Chapter 9 of the BDAR as required under the BAM. Recommended action: 10. The quantum of direct impact values for EPBC Act listed threatened species in the BDAR and BAM-C be thoroughly reviewed to identify and resolve all discrepancies.				
Other Considerations	Verify if any relevant Commonwealth guidelines and policy statements are applicable to the action and listed threatened species and/or community, including but not limited to: ☐ International environmental obligations ☒ Recovery Plans ☒ Approved Conservation Advice ☐ Threat Abatement Plans <i>The relevant Commonwealth guidelines and policy statements for each species and community are available at: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl</i> For each EPBC Act listed threatened species and/or community, provide advice on whether the assessment has been adequately informed by applicable Commonwealth guidelines and/or policy statements. For example, the interaction between the proposed action and important populations or critical habitat identified in policy documents and/or the interaction between the proposed action and threatening processes or recommended conservation actions outlined in Commonwealth policies and plans. The significant impact assessments contained in section 9.1.2 of the BDAR have been informed by the relevant conservation advice and recovery plans where applicable (refer to Table B). The assessments have also included discussion of important populations and critical habitat for each EPBC Act threatened entity where applicable.				BLA clauses 6.2(b)(iv), 7.2(c), 7.3 and 7.4

Requirement	Information					Reference (BAM / BLA ¹)
	Table B: Commonwealth guidelines and policy statements used to inform each significant impact assessment.					
	Threatened entity	Conservation advice	Recovery plan	Important population	Critical habitat	
	Lowland rainforest of subtropical Australia	yes	n/a	n/a	n/a	
	Pouched frog	yes	n/a	yes	n/a	
	South-eastern glossy black-cockatoo	yes	n/a	n/a	n/a	
	Large-eared pied bat	yes	yes	yes	yes	
	Corokia	yes	n/a	n/a	n/a	
	Thorny pea	yes	n/a	n/a	n/a	
	Rusty rose walnut	yes	n/a	n/a	n/a	
	Latham's snipe	yes	n/a	n/a	yes	
	Red bobble nut	yes	n/a	n/a	n/a	
	White-throated needletail	yes	n/a	n/a	n/a	
	Rough-shelled bush-nut	n/a	yes	yes	n/a	
	Slender marsdenia	yes	n/a	n/a	n/a	
	Giant barred frog	yes	yes	n/a	yes	
	Black-faced monarch	n/a	n/a	n/a	n/a	
	Koala	yes	yes	n/a	n/a	
	Southern pink underwing moth	yes	n/a	n/a	n/a	
	Grey-headed flying-fox	n/a	yes	yes	yes	
	Rufous fantail	n/a	n/a	n/a	n/a	
Scrub turpentine	yes	n/a	n/a	n/a		

Requirement	Information						Reference (BAM / BLA ¹)
	Native guava	yes	n/a	n/a	n/a		
	Spectacled monarch	n/a	n/a	n/a	n/a		
	Red lilly pilly	yes	n/a	n/a	n/a		
	Durobby	yes	n/a	n/a	n/a		
	Mitchell's rainforest snail	yes	yes	n/a	n/a		

TABLE 2: MNES IMPACT AND OFFSET SUMMARY

Threatened Species / Community listed under EPBC Act	PCTs associated with the ecosystem credit species / ecological community (if applicable)	Impact Area or No. Individuals	Credits Required	Offsetting Approach	Reference (EIS, BDAR)
Lowland Rainforest of Subtropical Australia	1302	8.77 ha	332	Biodiversity Offsets Scheme	BDAR Table 8.2
Pouched Frog (<i>Assa darlingtonia</i>)	827; 1302	32.2 ha	1071	Biodiversity Offsets Scheme	BDAR Table 8.3
South-eastern Glossy Black-cockatoo (<i>Calyptrorhynchus lathami lathami</i>)	827; 1073	162.49 ha	4662 (ecosystem credits)	Biodiversity Offsets Scheme	BDAR Table 8.4
Corokia (<i>Corokia whiteana</i>)	827; 1302	12 individuals	36	Biodiversity Offsets Scheme	BDAR Table 8.3
Thorny Pea (<i>Desmodium acanthocladum</i>)	827	2.2 ha	67	Biodiversity Offsets Scheme	BDAR Table 8.3
Rusty Rose Walnut (<i>Endiandra hayesii</i>)	827; 1302	50 individuals	100	Biodiversity Offsets Scheme	BDAR Table 8.3
Red Boppel Nut (<i>Hicksbeachia pinnatifolia</i>)	827	4 individuals	8	Biodiversity Offsets Scheme	BDAR Table 8.3
Rough-shelled Bush-nut (<i>Macadamia tetrahylla</i>)	827	12 individuals	24	Biodiversity Offsets Scheme	BDAR Table 8.3
Slender Marsdenia (<i>Marsdenia longiloba</i>)	827; 1073; 1302	78.96 ha	2853	Biodiversity Offsets Scheme	BDAR Table 8.3
Giant Barred Frog (<i>Mixophyes iteratus</i>)	827; 1302	6.03 ha	191	Biodiversity Offsets Scheme	BDAR Table 8.3
Koala (<i>Phascolarctos cinereus</i>)	827; 1302; 1073	159.7 ha	5468	Biodiversity Offsets Scheme	BDAR Table 8.3
Southern Pink Underwing Moth (<i>Phyllodes imperialis</i>)	827; 1302	0.09 ha	2	Biodiversity Offsets Scheme	BDAR Table 8.3
Grey-headed Flying-fox (<i>Pteropus poliocephalus</i>)	827; 1302; 1073	164.5 ha	4994 (ecosystem credits)	Biodiversity Offsets Scheme	BDAR Table 8.4

Scrub Turpentine (<i>Rhodamnia rubescens</i>)	827; 1073; 1302	709 individuals	2127	Biodiversity Offsets Scheme	BDAR Table 8.3
Native Guava (<i>Rhodomyrtus psidioides</i>)	827	95.6 ha	5090	Biodiversity Offsets Scheme	BDAR Table 8.3
Red Lilly Pilly (<i>Syzygium hodgkinsoniae</i>)	827; 1302	105 individuals	210	Biodiversity Offsets Scheme	BDAR Table 8.3
Durobby (<i>Syzygium moorei</i>)	827	16 individuals	48	Biodiversity Offsets Scheme	BDAR Table 8.3
Mitchell's Rainforest Snail (<i>Thersites mitchellae</i>)	827; 1302	2.20 ha	113	Biodiversity Offsets Scheme	BDAR Table 8.3