

APPENDIX D1: RESPONSE TO BIODIVERSITY SUBMISSIONS (PSC, HWC AND CPHR)

18 March 2026

Hunter Central Coast
Conservation Programs, Heritage and Regulation Group (CPHR),
DCCEEW, New South Wales,
Australia

SUBJECT: Newcastle Sands MOD 4 – Responses

To whom it may concern,

Wedgetail Project Consulting Pty Ltd (Wedgetail) was engaged by Williamtown Sand Syndicate to address the Request for Further Information (RFI) from the New South Wales (NSW) Department of Climate Change, Energy, the Environment and Water (DCCEEW), Port Stephens Council, and Hunter Water Corporation regarding the Modification Application and Report for the Cabbage Tree Road Sand Quarry Modification 4 Western Extension (SSD-6125),

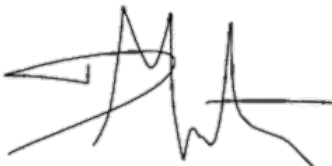
The following summarises the response the RFI and amendments made to the Biodiversity Development Assessment Report (BDAR).

Responses to each of the contentions are detailed in **Table 1** below.

If you have any further queries please do not hesitate to contact the undersigned.

Yours Sincerely,

David Martin



David Martin

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Table 1: Response to CPHR - Modification Application and Report for the Cabbage Tree Road Sand Quarry Modification 4 Western Extension (SSD-6125)

Issue	Recommended Action, Extent and Timing	Addressed
Issue 1: The Modification Application does not meet the minimum requirements of the BC Act		
<p><u><i>Requirements for Modification Applications</i></u></p> <p>In accordance with BC Act and The Departments website, the current Biodiversity Development Assessment Report (BDAR) must be prepared following the Biodiversity Assessment Method (BAM) and in accordance with the requirements for modifications. The BDAR will need to:</p> <ul style="list-style-type: none"> • Outline available information about the original impact of the development and consider any measures already taken to avoid, minimise or offset the impact on biodiversity values in connection with the approval before the proposed modification. • Identify those offset requirements that have been discharged with documentary evidence. • Assess any new impacts on biodiversity values resulting from the modification of the development in accordance with the Biodiversity Assessment Method. • Identify offset requirements and any new measures to avoid and minimise impacts in accordance with the Biodiversity Assessment Method. 	<p>CPHR recommend that the BSS be finalised prior to or in parallel with Mod 4 to support the current application. The proponent may either formalise the onsite BSS to satisfy their offset obligation or update the BDAR to clearly detail how the previous offset obligation remain unmet. This must include the removal of references to the "offset area." Accurate and complete information is required to enable a proper assessment of impacts and to support the submission of a valid BDAR.</p> <p>It is recommended the proponent finalise the BSS application as per SSD 6125 Consent Condition 34 and retire all credits generated from the BSS as identified in SSD 6125 Consent Condition 34 and the Biodiversity Offset Strategy (Kleinfelder 2016).</p> <p>Provide information and evidence to demonstrate the outcomes of existing obligations for conditions 33 – 41.</p>	<p>The amended BDAR outlines the original impacts (Section 5.2.3), original avoid and minimise measures (Section 5.1.3), offset requirements already met, new impacts to biodiversity values (Section 5.2), and new offset requirements in accordance with the BAM (Section 6.2)</p> <p>The BDAR details the status of the onsite BSA within the amended BDAR (Section 5.2.4).</p> <p>Establishment of the onsite BSA will run in parallel with MOD 4, but will be independent (i.e. approval of the SSDA does not require finalisation of the onsite BSA)</p>

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<p>The current BDAR incorrectly references the 'offset area' and includes this area in the assessment of impacts. CPHR cannot accept these statements, as the offset obligation associated with the previous impact has not been fulfilled. The BDAR must clearly outline how the offset obligation for the previous impact remains unmet and provide accurate and transparent information to support a proper assessment.</p> <p>The BDAR is also required to clearly describe the original impact, with particular emphasis on the resultant Significant Impact to both the Koala (<i>Phascolarctos cinereus</i>) and <i>Eucalyptus parramattensis</i> subsp. <i>decadens</i>.</p> <p>Total impacts are as follows:</p> <table border="1" data-bbox="206 975 792 1305"> <thead> <tr> <th>Species/ Vegetation Impacted</th> <th>Previous Impact</th> <th>New Impact</th> <th>Total Impact</th> </tr> </thead> <tbody> <tr> <td>Native vegetation</td> <td>53.9ha</td> <td>5.29ha</td> <td>59.19ha</td> </tr> <tr> <td><i>Eucalyptus parramattensis</i> subsp. <i>Decadens</i></td> <td>284 individuals</td> <td>30 individuals</td> <td>314ha</td> </tr> <tr> <td>Koala</td> <td>53.9ha</td> <td>2.82ha</td> <td>56.72ha</td> </tr> <tr> <td>Squirrel Glider</td> <td>53.9ha</td> <td>4.6ha</td> <td>58.5ha</td> </tr> <tr> <td>Mahony's Toadlet</td> <td>53.9ha</td> <td>5.29ha</td> <td>59.19ha</td> </tr> <tr> <td><i>Diuris arenaria</i></td> <td>53.9ha</td> <td>5.29ha</td> <td>59.19ha</td> </tr> <tr> <td>Wallum Froglet</td> <td>53.9ha</td> <td>0.8ha</td> <td>54.7ha</td> </tr> </tbody> </table>	Species/ Vegetation Impacted	Previous Impact	New Impact	Total Impact	Native vegetation	53.9ha	5.29ha	59.19ha	<i>Eucalyptus parramattensis</i> subsp. <i>Decadens</i>	284 individuals	30 individuals	314ha	Koala	53.9ha	2.82ha	56.72ha	Squirrel Glider	53.9ha	4.6ha	58.5ha	Mahony's Toadlet	53.9ha	5.29ha	59.19ha	<i>Diuris arenaria</i>	53.9ha	5.29ha	59.19ha	Wallum Froglet	53.9ha	0.8ha	54.7ha		
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<p>Note the above totals differ from the BDAR as the total impacts from the proposal were not included within the BDAR.</p> <p><u>Satisfy conditions of consent</u></p> <p>The offset obligation for the previous impact has not yet been met. The establishment of the Biodiversity Stewardship Site (BSS) and meeting of required offset is an important element to support the current application and its proposed impacts. Without such it is unclear how impacts to threatened species particularly Koala, Eucalyptus parramattensis subsp. Decadens and those entities at risk of a Serious and Irreversible Impact (SAII) can be justified and supported.</p> <p>It is recommended the establishment of the BSS be undertaken in parallel with Mod 4 to ensure compliance with previous approvals and support the current modification application.</p>		
Issue 2: Credit calculation is required to be in accordance with the BOS and BAM 2020		
<p>The BDAR has not accurately calculated the credit requirement for the impacts proposed by Mod 4 in accordance with the BOS and BAM 2020.</p> <p>The BDAR appears to devise their own approach to offsetting requirements. The BDAR states 'the Western Extension of this development requires</p>	<p>The BDAR and BAM-C is to be updated to ensure the impacts proposed for Mod 4 are to be assessed in accordance with the BAM. BAM credit calculations need to be in accordance with the BAM and submitted via the Biodiversity Offset and Agreement Management System (BOAMs).</p>	<p>The amended BDAR provides clarity on the proposed offset approach. Offsetting requirement associated with the MOD 4 impact area will not be met by the onsite BSA or swapping of areas previously approved for impact.</p>


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<p>offsetting, and the remaining areas require replacement. The areas requiring replacement can be offset by finding equivalent areas within the Project Area and adding them into the Proposed On-site Offset Area.'</p> <p>The BDAR and BAM-C only include impacts proposed for the western extension to calculate the credit requirement and only the impacts from the western extension have been included in the assessment of impacts on threatened species.</p> <p>This approach is not in accordance with the BAM ad BC Act, and as such cannot be accepted.</p> <p>As all credits generated from the BSS are to be retired as identified in SSD 6125 Consent Condition 34 and the Biodiversity Offset Strategy (Kleinfelder 2016), areas proposed to be added to the BSS may be utilised to demonstrate avoidance of impacts for the Mod 4 impact. This would allow the proponent to demonstrate adherence to the avoid and minimise hierarchy as well as a measure to avoid impacts to SAll entities.</p> <p>Additional areas of impact that were previously required to be included in the onsite 'offset area' by Condition 34 are to be assessed and credits generated in accordance with the BAM.</p>	<p>Additional areas proposed to be added to the BSS may be identified within the BDAR as areas of avoidance to demonstrate the avoidance and minimisation of impacts to biodiversity from the Mod 4 Application.</p>	<p>Additional areas of impact that were previously required to be included in the onsite BSA will be offset in accordance with the BAM</p>
<p>Issue 3: Proposed Amendment to Condition 34 and Appendix 6 in SSD-6125 relating to the Biodiversity Offset Strategy</p>		

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<p><u><i>Request to change the biodiversity credits and wording of SSD 6125 Condition 34</i></u></p> <p>Condition 34 that refers to the Biodiversity Offset Strategy (Kleinfelder 2016), includes commitment to establish an onsite BSS (formerly referred to as a BioBank site) and retire all ecosystem (1,189 ecosystem credits) and all species credits (18,943 species credits) generated at the onsite BSS.</p> <p>As discussed above it is recommended that the offset obligation in accordance with this condition be met to support the Mod 4 Application. This condition may then be removed and replaced by a new condition relating to the new credit requirement for the Mod 4 impacts.</p> <p>The proponents suggested changes to the consent include removing the timing for credit retirement, that the condition reference a indicative project and BSS boundary and that the credit obligation may be modified. The suggested changes create an unacceptable amount of uncertainty and risk around the offset obligation.</p> <p>Along with this Table 4-1 of the Modification Report states 'creation of a Stewardship Site (and the retirement of all credits created)' but then contradicts this statement by stating 'with the increase in offset area no additional retirement of</p>	<p>The proponent should finalise the BSS application as per SSD 6125 Consent Condition 34 and align the boundaries of the BSS and project footprint. All credits generated from the BSS are to be retired as identified in SSD 6125 Consent Condition 34 and the Biodiversity Offset Strategy (Kleinfelder 2016).</p> <p>Once the BDAR and BAM-C is to be updated to ensure the impacts proposed for Mod 4 and credit generation is in accordance with the BAM an appropriate condition is to be prepared reflecting full credit obligation identified in the BDAR and that the proponent must meet any credit obligation before the project or impact commences.</p> <p>BCD supports removing the Eastern Osprey biodiversity credit requirement from SSD 6125 Consent Condition 34.</p>	<p>The Applicant will meet their obligations under Condition 34 of their conditions of consent (SSD-6125) by meeting the requirement of "Biodiversity credits to be retired from the 131 ha offset area on the development site" through the establishment of the 131 ha onsite offset site - not through the creation of and retirement of the number of credits listed in table 4 of the Conditions of Consent</p>

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<p>credits is proposed for the change in impact area within the original subject land’.</p> <p>The retirement of all credits generated by the BSS is a critical component of the original offset strategy and is a necessary step to allow the fulfillment the Total Fund Deposit (TFD) that triggers the commencement of active site management. Failure to retire all credits may result in the TFD remaining unfulfilled for an indefinite period, creating an unacceptable level of uncertainty regarding the implementation of the BSS, the anticipated biodiversity gains, and the achievement of the original offset strategy and conditions of consent.</p> <p><u><i>Request to remove the requirement for the Eastern Osprey biodiversity credit</i></u></p> <p>In accordance with advice provided by CPHR for Mod 3 (DOC24/292744-5) CPHR supports removing the Eastern Osprey biodiversity credit requirement from SSD 6125 Consent Condition 34.</p> <p><u><i>Credit requirement Mod 4 impacts</i></u></p> <p>Once the accredited assessor has accurately identified the credit obligations in the BDAR by applying the BAM. A condition should be prepared in accordance with Guidance on preparing conditions of consent from the Biodiversity</p>		

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<p>Development Assessment Report 2019 stating that all credits are to be retired prior to any impacts.</p> <p><u>Rehabilitation and Final Landform Requirements</u></p> <p>Table 4-1 of the Modification Report suggests the land disturbed by the Western Extension would be rehabilitated to a more open grassland environment with scattered trees. This is not an acceptable outcome, the rehabilitation objectives for this area should be the establishment of a sustainable native ecosystem commensurate with the existing or surrounding Plant Community Types (PCTs). This aligns with the requirements of the existing rehabilitation strategy.</p>		
<p>Issue 4: SAI species require further assessment and consideration of avoidance</p>		
<p><u>Diuris arenaria (Sand Doubletail or Tomaree donkey orchid)</u></p> <p>The proposal will result in a direct impact to one individual of Diuris arenaria and 5.29 hectares of suitable habitat for the species. The loss of this individual would constitute the removal of the entire known onsite population, as it represents the only recorded occurrence at this location. The nearest known records of the species are located approximately 8 km to the east and 6 km to the northwest of the site.</p>	<p>The BDAR is to be updated in accordance with Section 9.1 of the BAM. SAI assessment are to include consideration of indirect and prescribed impacts including impacts to hydrological processes and connectivity.</p> <p>Assess Mahoney's Toadlet as a potential SAI entity given the impact proposed to habitat for this species, TBDC advice and its suspected limited geographical distribution.</p> <p>Reduction in the impact footprint within the western extension to avoid areas high quality habitat.</p>	<p>The proposed development has been amended to include a reduced impact area, avoiding all direct impacts to the SAI species Diuris arenaria - this is detailed within the amended BDAR</p> <p>The proposed development has been amended to include a reduced impact area and staging that minimises direct impacts to the habitat and connectivity for Mahony's Toadlet - this is detailed within the amended</p>

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<p>The BDAR has failed to adequately assess the significance of these impacts or acknowledge the complete elimination of this subpopulation from the site.</p> <p><u>Mahony's Toadlet (<i>Uperoleia mahonyi</i>)</u></p> <p>Previous advice provided by CPHR for Modification 3 (DOC24/292744-5) identified Mahony's Toadlet as potentially at risk of SAI and requested that a SAI assessment be undertaken and included in the BDAR. This assessment has not been provided. Accordingly, a SAI assessment must be undertaken in accordance with Section 9.1 of the BAM and included within the BDAR.</p> <p>Mahony's Toadlet has been recorded at 11 locations within the western extension area and was previously detected onsite during surveys undertaken to support the original approval. The current proposal will result in direct impacts to 5.29 hectares of suitable habitat for the species and will isolate core breeding habitat from the surrounding landscape.</p> <p><u>SAI Assessment</u></p> <p>When considering the interpretation of provisions for SAI the relevant impact cannot be considered in isolation from the condition of the threatened</p>	<p>Avoid isolation of breeding habitat for Mahony's toadlet as can be seen in the below plan.</p>  <p>This area was identified as core habitat for the species in the Habitat Assessment prepared by Kleinfelder in 2016. Connecting corridors should be maintained that link waterbodies to allow metapopulation processes and allow connection to the surrounding landscape. See below for an indicative example of how connectivity should be maintained to connect important habitat and maintain connectivity through the site. It is to be noted that this was a requirement of the previous approval.</p>	<p>BDAR. A SAI assessment for the species has been provided in the amended BDAR</p> <p>Recommendations provided by CPHR to reduce impacts to SAI species have been considered and an alternative impact area has been proposed and discussed with CPHR. This amended impact area is included within the amended BDAR</p>

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<p>species outside of the impact site, as such the SAI assessments undertaken by CPHR for Diuris arenaria and Mahoney' Toadlet will include impacts from both the approved and proposed development.</p> <p>The impacts as proposed are considered highly likely to constitute a SAI. Recommendations are provided below that may reduce impacts to the SAI species.</p>	 <p>Impacts to the identified Diuris arenaria should be avoided as it currently represents the total onsite population of the species.</p> <p>Establishment of the onsite BSS to ensure the maintenance and protection of remaining habitat for both species.</p> <p>Inclusion of additional areas of suitable habitat for both species into the onsite BSS to demonstrate avoidance of impacts.</p> <p>Remove reference to the offset area from the SAI Assessment unless establishment of the BSS is finalised.</p>	

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Issue 5: Additional avoid and minimise provisions are required in accordance with the BAM and BC Act		
<p>The proposed Mod 4 area has high environmental values (HEV) including:</p> <p>Habitat for threatened species such as the Mahony's Toadlet, Squirrel Glider, Wallum Froglet, Koala, Diuris arenaria and Eucalyptus parramattensis subsp. Decadens.</p> <p>Vegetation that assists in maintaining corridor connectivity across the site and reducing edge impacts to the future offset area.</p> <p>Koala habitat identified in the Port Stephens Comprehensive Koala Plan of Management (CKPoM), preferred koala habitat.</p> <p>The BDAR has failed to identify how the significant findings of the BAM Assessment have informed the avoid and minimise strategy and led to avoidance of impacts to biodiversity particularly within the western extension area.</p> <p>The BAM identifies 2 key areas of project planning to avoid and minimise direct, indirect and prescribed impacts:</p> <p>proposal location – locating the development away from the highest biodiversity values</p>	<p>Amendments to the project boundary is required to demonstrate how the findings of the stage 1 BAM assessment have informed the boundary and met the requirements of the avoid and minimise hierarchy.</p> <p>Inclusion of additional areas into the onsite BSS to demonstrate avoidance of impacts.</p> <p>Note: CPHR would be available for further discussion to assist in resolving this matter.</p>	<p>The proposed development has been amended to include a reduced impact area and staging that reduces direct impacts to threatened species, their habitats and connectivity. This amended impact area is illustrated and assessed in the amended BDAR</p>

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<p>proposal design – retaining biodiversity values through design features that limit vegetation clearing or reduce the amount of development within the footprint.</p> <p>The BDAR states ‘significant habitat features identified during the field surveys for the BDAR were communicated to the client to allow for potential avoidance and minimisation measures to be adapted’.</p> <p>CPHR considers that additional refinement of the impact footprint is required to avoid areas of significant importance to threatened species.</p> <p>As discussed above of particular concern are impacts to Koala, Eucalyptus parramattensis subsp. Decadens and SAIL species. Recommendations for avoidance of SAIL species habitat are provided above.</p> <p>The proposed Mod 4 area should be modified so that disturbance areas avoid areas of HEV that were previously determined to require avoidance and protection.</p>		
Issue 6: Vegetation assessment does not meet the requirements of the BAM 2020		
<p>Both BAM Plot Q1 and Q2 are located across two vegetation zones which likely distorts the VI score of each zone. In accordance with the Biodiversity</p>	<p>Additional BAM Plots are required to be undertaken to meet the minimum requirements of the BAM.</p>	<p>Vegetation mapping has been amended to ensure that vegetation zones are better</p>

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<p>Assessment Method 2020 Operational Manual – Stage 1 if the vegetation zone is smaller than the standard plot size dimensions allow, the assessor may adjust the plot dimensions to fit as best as possible, providing it is representative of the vegetation zone.</p>		<p>defined. Tight mapping of the vegetation zones and limited space have led to some plots crossing multiple zones. However, at the time of the assessment the plots were completed within vegetation that was representative of the vegetation zone.</p>
<p>Issue 7: The BDAR does not meet the minimum fauna survey requirements in accordance with the BAM 2020.</p>		
<p>Fauna survey effort required to cover all areas of the site</p> <p>Survey for a number of threatened fauna species was not undertaken across all areas proposed for impact, specifically areas adjacent to the existing quarry area. While exclusion of some of these species' surveys may be justifiable, discussion of this must be included within the BDAR. The following species are required to be surveyed for within all suitable habitat within the subject land:</p> <ul style="list-style-type: none"> • Bush Stone-curlew (<i>Burhinus grallarius</i>) • Eastern Pygmy Possum (<i>Cercartetus nanus</i>) • Southern Greater Glider (<i>Petauroides volans</i>) • Brush-tailed Phascogale (<i>Phascogale tapoatafa</i>) 	<p>Additional fauna survey effort is required to be undertaken to meet the minimum requirements of the BAM and BC Act. Alternatively, the proponent may opt to assume presence for the species or seek an expert report.</p> <p>Exclusion of species only to be undertaken if given adequate justification in accordance with the BAM.</p> <p>Wallum Froglet polygon to be in accordance with the TBDC.</p>	<p>CPHR is in agreement that survey effort that was sufficient within Lot 9/DP 239608 but reduced in small impact areas within Lot 100 / DP 1263921 do not need to be replicated including additional remote cameras for Eastern Pygmy Possum, Brush-tailed Phascogale, and Long-nosed Potoroo, additional pitfall traps for Common Planigale, or additional nocturnal surveys for Bush Stone Curlew and Southern Greater Glider</p> <p>Additional spotlighting will be completed for Stephens' banded snake in accordance with the</p>

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<ul style="list-style-type: none"> • Common Planigale (<i>Planigale maculata</i>) • Long-nosed Potoroo (<i>Planigale maculata</i>) <p>Survey effort does not meet the minimum requirements of the BAM</p> <p>Threatened species surveys must be conducted as per section 5.3 of the BAM, which requires surveys to comply with the Department's threatened species survey guides and the Threatened Biodiversity Data Collection (TBDC). The following is required:</p> <p>Spotlight or nocturnal surveys are required to be undertaken for Stephens' banded snake (<i>Hoplocephalus stephensii</i>) in accordance with the Department of Planning and Environment Threatened reptiles Biodiversity Assessment Method survey guide 2022. Report says excluded.</p> <p>Survey in accordance with NSW Survey Guide for Threatened Frogs is required to be undertaken for green and golden bell frog (<i>Litoria aurea</i>). The BDAR does not provide sufficient information to determine the survey methodology undertaken and states 'areas of suitable amphibian habitat were also inspected during other targeted surveys including spotlighting surveys' however this is not an accepted survey method. Maps so not provide suitable evidence of frog surveys.</p>		<p>Department of Planning and Environment Threatened reptiles Biodiversity Assessment Method survey guide 2022</p> <p>Additional frog surveys will be completed for Green and Golden Bell Frog in accordance with NSW Survey Guide for Threatened Frogs</p> <p>Surveys for are not required for the following threatened microbats:</p> <p>Eastern Cave Bat (<i>Vespdelus trouhntoni</i>) - Bat Survey Guidelines: "Potential habitat: All areas with the PCTs associated with the species (as per the TBDC) on the subject land where the subject land is within 2 kilometres of caves, scarps, cliffs, rock overhangs and disused mines" . While both PCTs within the Subject Land are linked to the species, there are no caves, cliffs, rock overhangs or disused mines within 2km of the Subject Land (see attached Map)</p>

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<ul style="list-style-type: none"> Survey for Microbats is required to be undertaken in accordance with 'Species credit' threatened bats and their habitats NSW survey guide for the Biodiversity Assessment Method. The BDAR described the presence of suitable habitat being old sheds and that roost searches were undertaken however this is not an accepted survey method in accordance with the guideline. <p><u>Exclusion of species from the BAM-C not supported</u></p> <p>To remove a candidate species from the species list, the assessor must provide adequate justification in the BDAR including discussion of microhabitat requirements of the species as per steps 1 – 6 Section 5.2.1 of the BAM. Exclusion of the following species from the BAM-C is not supported:</p> <ul style="list-style-type: none"> Noah's False Chickweed (<i>Lindernia alsinoides</i>) - no justification provided within the BDAR and habitat constraint present onsite. Black neck stork (<i>Ephippiorhynchus asiaticus</i>) – no justification provided within the BDAR and suitable habitat present onsite being shallow, open freshwater or saline wetlands. 		<p>Large-eared Pied Bat (<i>Chalinolobus dwyeri</i>) - Bat Survey Guidelines: "Potential habitat: All areas with the PCTs associated with the species (as per the TBDC) on the subject land where the subject land is within 2 kilometres of caves, scarps, cliffs, rock overhangs and disused mines". While both PCTs within the Subject Land are linked to the species, there are no caves, cliffs, rock overhangs or disused mines within 2km of the Subject Land (see attached Map)</p> <p>Eastern bent-winged bat (<i>Miniopterus orianae oceanensis</i>) - Bat Survey Guidelines: "Potential habitat: Caves, tunnels, mines or other structures known or suspected to be used by <i>M. orianae oceanensis</i> including species records in the NSW BioNet Atlas with microhabitat code 'IC – in cave'; observation type code 'E nest-roost'; with numbers of</p>

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<ul style="list-style-type: none"> Microbats (<i>Vespadelus troughtoni</i>, <i>Miniopterus orianae oceanensis</i>, <i>Miniopterus australis</i>) - The BDAR described the presence of suitable habitat with old sheds present on-site. <p>For each species that is removed from the assessment, the BDAR must document, along with the reason, a detailed and evidence-based justification.</p> <p><u>Wallum Froglet</u></p> <p>The BDAR states that the vegetation zone boundary that has been used to define the edge of the aquatic habitat as defining the 'top of bank' from which to generate the species polygon. However, this is not represented in Figure 16 of the report.</p>		<p>individuals >500; or from the scientific literature. All breeding habitat including the cave, or other features used for breeding, and the area immediately surrounding this feature". There are no caves, tunnels, mines, or other structures known or suspected to be used by <i>M. orianae oceanensis</i> including species records in BioNet as above within 100m of the Subject Land.</p> <p>Little bent-winged bat (<i>Miniopterus australis</i>) - Bat Survey Guidelines: "Potential habitat: Caves, tunnels, mines or other structures known or suspected to be used by <i>M. australis</i> including species records in the NSW BioNet Atlas with microhabitat code 'IC – in cave'; observation type code 'E nest-roost'; with numbers of individuals >500; or from the scientific literature. All breeding habitat including the cave, or other features used for breeding, and the area immediately</p>

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		<p>surrounding this feature". There are no caves, tunnels, mines, or other structures known or suspected to be used by <i>M. australis</i> including species records in BioNet as above within 100m of the Subject Land.</p> <p>Southern Myotis (<i>Myotis macropus</i>) - Bat Survey Guidelines: "Potential habitat: All PCTs associated with the species (as per the TBDC) within 200 metres of the bank of any medium to large permanent creeks, rivers, lakes or other waterways (i.e. with pools/ stretches 3 metres or wider) on the subject land (Anderson et al. 2005)". There are no areas of open water (>3m wide) within 200m of the Subject Land.</p> <p>Justification for exclusion of species from the BAM-C:</p> <p><i>Lindernia alsinoides</i> (Noah's False Chickweed) - Targeted surveys were completed in the survey period for this species (Round 2 in November).</p>

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		<p>Black neck stork (Ephippiorhynchus asiaticus) - This species is an Ecosystem Species and therefore does not require targeted surveys in accordance with the BAM</p> <p>Microbats (Vespadelus troughtoni, Miniopterus orianae oceanensis, Miniopterus australis) - These species were excluded as Candidate Species following the NSW 'Species credit' threatened bats and their habitats NSW guide for the Biodiversity Assessment Method guidelines</p> <p>Wallum Froglet - Top of bank was previously defined as the edge of the PCT. As this is not supported Wedgetail will look at DEM overlays and ground-truthing the top of bank so as to more accurately mapped the top of bank and resulting species polygon.</p>
<p>Issue 8: Further information required to determine impacts GDEs and threatened species.</p>		

Issue	Recommended Action, Extent and Timing	Addressed
<p>Potential impacts to groundwater associated with the quarry include effects on groundwater hydrology and groundwater quality because of quarry removing vegetation, sediment and potentially from intersecting the water table.</p> <p>Additional assessment is required to be undertaken be undertaken in accordance with Section 7 and 8 the BAM 2020.</p> <p>Section 8.3.4 of the BAM requires justification of predictions of impacts with appropriate hydrological modelling (if available), relevant literature and other published sources of information, or consultation with species experts.</p> <p>Minimum information requirement for assessment of groundwater impacts has not been provided with the Groundwater Impacts Assessment prepared by Groundwater Exploration Services, November 2024 and the BDAR provided no mention of GDEs.</p> <p>The groundwater assessment is to be prepared in accordance with the following guidelines:</p> <p>Groundwater assessment toolbox for major projects in NSW - Overview document. Technical guideline. January 2022</p>	<p>The BDAR is to be updated to include minimum information requirements regarding prescribed impacts in accordance with Appendix K of the BAM 2020.</p> <p>The Groundwater Impact Assessment Report is to be prepared in accordance with The Departments major projects groundwater guidelines and ensure minimum information requirements are met. This is to then inform the BDAR.</p>	<p>Groundwater assessments have been undertaken for the impact area and the BDAR addresses this throughout</p>

Issue	Recommended Action, Extent and Timing	Addressed
<p>Guidelines for Groundwater Documentation for SSD/SSI Projects. Technical guideline. January 2022</p> <p>Minimum Groundwater Modelling Requirements for SSD/SSI Projects Technical guideline January 2022</p> <p>Cumulative Groundwater Impact Assessment Approaches Information paper. January 2022</p> <p>https://water.dpie.nsw.gov.au/our-work/licensing-and-approvals/major-projects/major-projects-groundwater-guidelines</p> <p>Assessment of impacts to GDEs and threatened species is unable to be undertaken until adequate assessment is undertaken to understand the potential impacts to GDEs and threatened species.</p>		
<p>Issue 9: Further information regarding prescribed impacts is required to meet the minimum requirements of the BAM 2020.</p>		
<p>Prescribed additional biodiversity impacts (prescribed impacts) must be assessed as part of the BOS, as per clause 6.1 of the BC Regulation and in accordance with Section 6 of the BAM. The BDAR has failed to identify and adequately assess impacts to the following prescribed impacts:</p> <p>Human-made structures.</p>	<p>The proponent should ensure that all prescribed impacts have been identified and adequately assessed in accordance with the BAM, the BDAR is to be updated, and data provided to demonstrate evidence of this.</p> <p>Further avoidance is to be demonstrated as detailed above, to reduce the impacts on connectivity within the site.</p>	<p>The amended BDAR more appropriately address prescribed impacts under the BAM (Section 5.1.2)</p>

Issue	Recommended Action, Extent and Timing	Addressed
<p>Water quality, water bodies and hydrological processes that sustain threatened entities.</p> <p>Impacts to connectivity was identified, however adequate avoidance and minimisation measures have been proposed.</p>	<p>Depending on the outcomes of further assessment an appropriate method and metrics should be proposed to the consent authority for calculating and allocating an offset quantum for the residual prescribed impact of a proposal.</p>	
<p>Issue 10: BDAR not valid in accordance with the BAM and BC Act</p>		
<p>The BAM-C biodiversity credit report that is included in BDAR must have a status of finalised (subsection 10.1.1(8) BAM 2020). The BAM-C biodiversity credit report must be finalised to comply with the certification requirements under the Biodiversity Conservation Act 2016 (BC Act) to ensure that the assessment is based on data that is current within 14 days of submission.</p> <p>The report appended to the BDAR was finalised 5 February 2025 and the modification was submitted 11 June 2025 which is outside the required 14 days.</p> <p>Along with this it is a requirement to submit all digital data associated with a BAR to the decision-maker (see Appendix K BAM 2020).</p>	<p>The BDAR is to be accompanied by the finalised credit report from the BAM calculator. A certified BDAR must be submitted within 14 days of the date that the credit report was finalised to be considered valid.</p> <p>It is a requirement to submit all digital data associated with a BAR to the decision-maker (see Appendix K BAM 2020) and the submission of the BOAMS parent case to CPHR for assessment.</p> <p>BAM C and Digital data submission is to be in accordance with the BAM Operational Manual Stage 2, Appendix D and is to contain the minimum digital data requirements in accordance with Table 7.</p>	<p>The amended BDAR contains a finalised BAM-C case and certification in accordance with the BAM</p>

Table 2: Response to Port Stephens Council Comments - Cabbage Tree Road Sand Quarry –Modification 4 – Western Extension (2025)

Issue	Recommended Action, Extent and Timing	Addressed
1. Impacts to <i>Diuris arenaria</i>		
<p>Diuris arenaria was identified during targeted surveys within the proposed Modification 4 expansion area. It is stated in the Biodiversity Development Assessment Report (BDAR) that 1 individual and 5.29 ha of suitable habitat for Diuris arenaria will be impacted as part of the proposed expansion and that no avoidance or minimisation of impacts to Diuris arenaria have been considered as part of the proposal. Diuris arenaria is listed as a species at risk of serious and irreversible impacts under Principle 3: species with very limited geographic distribution.</p>	<p>Given that the proposal will result in the removal of 5.29 ha of suitable habitat for a species identified as having a very limited geographic distribution, Council considers the impact of the proposed expansion on Diuris arenaria to be serious and irreversible. The proposed expansion area should be modified to avoid impacts to suitable Diuris arenaria habitat to the maximum possible extent and the BDAR should be amended to include details of measures which will minimise impacts to Diuris arenaria habitat.</p>	<p>The proposed development has been amended to include a reduced impact area, avoiding all direct impacts to the SAIL species Diuris arenaria - this is detailed within the amended BDAR</p>
2. Mahony's toadlet		
<p>Mahony's toadlet was identified during targeted surveys throughout the proposed expansion area. The Threatened Biodiversity Data Collection (TBDC) states that impacts to Mahony's toadlet frequently trigger serious and irreversible impacts and should be avoided as much as possible under the precautionary principle, due to an absence of knowledge and data on the species.</p>	<p>Council considers that the proposed impacts to Mahony's toadlet are likely to be serious and irreversible. The BDAR should be amended to include an assessment of Mahony's toadlet conducted in accordance with section 9.1.2 of the Biodiversity Assessment Method 2020. Where required, the proposed expansion area should be modified to avoid impacts to Mahony's toadlet and the BDAR should be amended to include details of measures which will</p>	<p>The proposed development has been amended to include a reduced impact area and staging that minimises direct impacts to the habitat and connectivity for Mahony's Toadlet - this is detailed within the amended BDAR. A SAIL assessment for the species has been pro</p>

Issue	Recommended Action, Extent and Timing	Addressed
	minimise impacts to Mahony's toadlet habitat.	
3. Eucalyptus camfieldii		
Confirmation is required on whether Eucalyptus camfieldii was detected on site. Numerous records of this species occur around the proposed expansion area and the BDAR states that targeted surveys were conducted, however, there is conflicting information in the BDAR which states that this species was not detected on site.	If Eucalyptus camfieldii was detected on site, updated figures should be provided in the BDAR showing the locations of individuals, and information provided demonstrating that impacts to this species have been avoided and minimised as part of the proposed expansion.	The species was not recorded within the Impact Area during targeted surveys.

Table 3: Response to Hunter Water Corporation Comments - Cabbage Tree Road Sand Quarry –Modification 4 – Western Extension (2025)

Issue	Recommended Action, Extent and Timing	Addressed
1. Western extension and resource boundary adjustments		
The existing quarry operation has been designed to comply with the NorBE requirement, approval conditions have been imposed to ensure this occurs and these are supported by operating protocols and site management plans. Provided there are no proposed changes to operating methods that would impact on compliance with this requirement and the proposed additional management controls are		<p>The staging of extraction ensures that a >30m buffer between the eastern extraction area and the proposed western extension is maintained throughout much of the operation of the western expansion, allowing proposed rehabilitation of the eastern extension to mature prior to clearing of Stage 9 (see below).</p> <p>Rehabilitation within the Western extension aims to reinstate the mix of native vegetation and cleared</p>

Issue	Recommended Action, Extent and Timing	Addressed
<p>implemented, Hunter Water has no objections to this aspect of the proposed modification.</p> <p>However, we note the higher level of disturbance in the proposed western extension area, the proposal to rehabilitate this area to grassland and the commensurate additional risks associated with achieving site rehabilitation objectives in other parts of the project area as a result of the disturbed land. This will require greater attention to detail and management of the site rehabilitation processes in parts of the site that are adjacent to the western extension area. Alternatively, rehabilitating the eastern part of the proposed western extension area with a native vegetation buffer (in the order of at least 30 metres) should assist greatly in achieving the rehabilitation objectives in other parts of the project area. In reality, the ongoing occupation and management of the western extension area after the completion of quarrying operations is considered to present a greater risk to the aquifer and surrounding residents than the quarry operations.</p>		<p>areas currently existing within the Subject Land. This presents no greater risk than current landuse.</p> 