



Our ref: DOC20/636541
Senders ref: SSD 10460

Ms Natasha Homsey
Senior Environmental Assessment Officer
Planning and Assessment
Department of Planning, Industry & Environment
GPO Box 39
SYDNEY NSW 2001

Via email: natasha.homsey@planning.nsw.gov.au

7 September 2020

Dear Ms Homsey

Subject: Hume Battery Energy Storage System (SSD 10460) – Environmental Impact Statement

Thank you for your email dated 6 August 2020 seeking comments from the Biodiversity and Conservation Division (BCD) of the Department of Planning, Industry and Environment (the Department) about the Environmental Impact Statement (EIS) for the Hume Battery Energy Storage System (BESS).

We have reviewed the exhibited EIS against the Secretary's Environmental Assessment Requirements (SEARs) provided by the Department to the proponent on 14 May 2020.

BCD considers that the EIS **does not** meet the Secretary's requirements for biodiversity and requires additional work to be compliant with the Biodiversity Assessment Method (BAM).

BCD acknowledge that parts of the proposal site are highly disturbed and threatened species habitat may be degraded. However, further details are needed before the project is determined to justify excluding species from the assessment to meet requirements of the BAM.

A summary of our assessment, advice and recommended conditions of approval is provided in **Attachment A**. Detailed comments are in **Attachment B**.

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

If you have any questions about this advice, please contact Miranda Kerr, Senior Biodiversity Conservation Officer, via rog.southwest@environment.nsw.gov.au or 02 6022 0607.

Yours sincerely

Andrew Fisher
Senior Team Leader Planning
South West Branch
Biodiversity and Conservation Division
Department of Planning, Industry and Environment

ATTACHMENT A – BCD Assessment Summary for Hume Battery Energy Storage System Environmental Impact Statement (SSD 10460)

ATTACHMENT B – Detailed comments for Hume Battery Energy Storage System Environmental Impact Statement (SSD 10460)

ATTACHMENT A BCD Assessment Summary for Hume Battery Energy Storage System Environmental Impact Statement (SSD 10460)

Key Issues

1.	Unmapped vegetation	<p>The BDAR requires extra detail to meet requirements of the BAM.</p> <p>Vegetation on the unmapped part of the development footprint has not been described. Plot data in Appendix B indicate that it may contain native vegetation.</p> <p>Recommended actions:</p> <ul style="list-style-type: none"> • Provide more information about vegetation in the development footprint that has not been included in a vegetation zone. Explain how the boundary of Zone 2 was determined. • Revise maps (Fig 2-1 and 4-1) to show BAM vegetation integrity plot location labelled with the plot identifier and vegetation zones numbered to correspond with BAM-C
	<i>Extent and Timing</i>	Pre-determination

2.	<i>Justify exclusion of species from assessment</i>	<p>There is not enough information to justify excluding the five threatened plant species that were not surveyed during the correct months. Further detail is needed to show that the site was adequately surveyed for threatened fauna habitat constraints.</p> <p>Recommended actions:</p> <ul style="list-style-type: none"> • Provide more detail to support exclusion of species credit flora that were not surveyed in the correct months. At a minimum, the BDAR should relate the vegetation assessment to habitat requirements for each threatened plant species. • Provide evidence that the field survey included adequate assessment of habitat elements or microhabitats for species excluded due to lack of habitat in Tables 5-1 and 5-3. • Update BAM-C to include Sloane’s froglet at Step 5
	<i>Extent and Timing</i>	Pre-determination

3.	<i>Revise mitigation measures</i>	<p>Any impact to vegetation due to the proposal including parking/turning areas for plant and equipment stores should be included in the assessment, or a measure included to limit those activities to existing cleared areas.</p> <p>The site is within a known movement corridor for Squirrel Glider. BCD support all measures to avoid harming the species during operation, particularly avoidance of barbed wire. We recommend a specific protocol for monitoring any wire fencing included in the final design.</p> <p>Recommended actions:</p> <ul style="list-style-type: none"> • Measures B01 and B03 be revised to ensure existing paved and cleared areas are used for vehicle movements and materials storage.
	<i>Extent and Timing</i>	Pre-construction
	<i>Recommended Conditions of Approval</i>	<ul style="list-style-type: none"> • <i>Prepare and implement a protocol for regular monitoring and fauna rescue (including contact details for local wildlife carers) if wire fencing is included in the final design.</i>

ATTACHMENT B Detailed comments for Hume Battery Energy Storage System Environmental Impact Statement (SSD 10460)

Biodiversity

The Biodiversity Development Assessment Report (BDAR) at Appendix D does not meet the Secretary's requirements for biodiversity.

Specific comments on the BDAR are as follows:

Biodiversity Development Assessment Report (EIS Appendix D IA213400_Hume BESS_BDAR, 31 July 2020)

BCD commend the proponent for consulting with local environment groups and including Squirrel Glider records that are not in biological databases. The BDAR and EIS include appropriate measures for mitigating potential impacts to this species.

Please note that BCD would prefer parts of Section 2 of the BDAR to be combined with Sections 4 and 5 so that it more closely follows BAM Table 25, which specifies the minimum information requirements for a BDAR. Assessment of whether the BAM has been correctly applied is easier if all the threatened species information is together rather than separated into method and results.

Sections 2 and 4

The vegetation on the unmapped part of the development footprint has not been described. It is not clear from aerial imagery how the boundary between this area and Zone 2 was determined. GIS data provided with the BDAR shows that BAM plot 4 is within the unmapped area. The floristic data in Appendix B indicates that Plot 4 includes native grass (*Themeda triandra*) with a cover of 5%.

The layout of the BDAR and mapped information about vegetation zones is confusing. It is difficult to work out how the plot data relate to the vegetation integrity and development footprint without a map of labelled plots. The maps of vegetation integrity plots should include individual plot identifiers. Floristic plots are usually mapped by a single point at the south-west corner. Figures 2-1 and 4-1 indicate that 10 vegetation integrity plots were sampled but there should be only one plot associated with each vegetation function mid-line.

The BDAR does not clearly map the vegetation zones to correspond with BAM-C. Please include the zone numbers on maps and explain early in the BDAR if and why there are zones that are not included in BAM-C – it is not until Section 4.2 (p 30) that the BDAR mentions that Zone 4 is not within the development footprint.

Table 2-1 indicates that 4 vegetation integrity plots were sampled in 4 vegetation zones. The data provided with the BDAR includes 5 BAM plots and Figure 2-1 indicates that 10 plots were sampled on the site. Section 2.4.2 (page 10) should clearly state the number of BAM plots sampled and how many were sampled but not included in BAM-C.

A more precise description of the on-site vegetation, including native and exotic cover and cover of dominant species in each stratum, would help to illustrate the degree of disturbance.

It is not clear if the flora species comprising the planted vegetation are native to NSW. Planted native vegetation is to be included in the assessment and included in species polygons if it provides threatened species habitat.

Recommended actions:

- *Provide more information about vegetation in the development footprint that has not been included in a vegetation zone. Explain how the boundary of Zone 2 was determined.*
- *Revise maps (Fig 2-1 and 4-1) to show BAM vegetation integrity plot location labelled with the plot identifier and vegetation zones numbered to correspond with BAM-C.*

Sections 2.7.1 and Section 5

Exclusion of threatened flora

There is not enough information to justify excluding the five threatened plant species that were not surveyed during the correct months.

The BAM requires survey for these species during flowering months because they are otherwise hard to see. Photos of the site on pages 26 and 27 show relatively dense ground cover, which would obscure herbs like the *Swainsona* species when not in flower.

The BDAR needs to provide evidence if threatened plants are being excluded from the assessment because the site is too degraded to provide habitat (BAM Section 6.4.1.17).

Section 5.3.1 (p 45) provides some information about the site condition, and the photos show that parts of the site appear to be in low condition. However, this information needs to be supported by the data and related to each species' habitat requirement. Further interpretation of the floristic and structural plot data may indicate the degree of disturbance.

Survey for fauna habitat constraints

Tables 5-1 and 5-3 provides justification for excluding species from further assessment due to lack of habitat elements specified by BAM-C.

To remove species from further assessment, justification must include, as a minimum, the specific habitat constraint(s) missing and/or degraded microhabitat on the subject land, a description of the field technique used to assess the presence of the constraint or microhabitat (e.g. the survey effort and technique used to assess hollow-bearing trees) and any other data or information used to make the decision (BAM Operational Manual Stage 1, page 37).

Section 5.1 (paragraph 4, page 34) states that an assessment was undertaken for the identified habitat constraints but does not provide details about how the site was surveyed to confirm the presence or absence of habitat elements, such as *Allocasuarina* species for Glossy Black Cockatoo and stick nests for threatened raptors.

For example, three trees above the large tree threshold for PCT 266 (> 50 cm DBH) and one hollow-bearing tree were recorded in Plot 3. The BDAR lacks evidence that a hollow-bearing tree assessment was undertaken outside the vegetation plots to support exclusion of the candidate species with specific hollow sizes.

BAM Calculator

While there are no implications for the project outcome, *Crinia sloanei* (Sloane's froglet) is not included in the list of species credit species that were required to be surveyed in BAM-C. It has been incorrectly listed as not predicted in Step 4. Similarly, according to Table A-14-1 (Appendix A, p 80) a survey was undertaken for *Amphibromus fluitans* (Swamp Wallaby Grass), however this is not mentioned in Section 2 or included in the BAM-C.

Recommended actions:

- *Provide more detail to support exclusion of species credit flora that were not surveyed in the correct months. At a minimum, the BDAR should relate the vegetation assessment to habitat requirements for each threatened plant species.*
- *Provide evidence that the field survey included adequate assessment of habitat elements or microhabitats for species excluded due to lack of habitat in Tables 5-1 and 5-3.*
- *Update BAM-C to include Sloane's froglet at Step 5.*

Section 10 Mitigating and managing impacts

The site is within a known movement corridor for Squirrel Glider. BCD support all measures to avoid harming the species during operation, particularly avoidance of barbed wire.

Table 10-1 (page 69) describes measures for mitigating impacts of the project on biodiversity. The first potential impact is to surrounding vegetation. Any impact to vegetation due to the proposal including parking/turning areas for plant and equipment stores should be included in the assessment, or a measure included to limit those activities to existing cleared areas.

Recommended actions:

- *Prepare and implement a protocol for regular monitoring and fauna rescue (including contact details for local wildlife carers) if wire fencing is included in the final design.*
- *Measures B01 and B03 be revised to ensure existing paved and cleared areas are used for vehicle movements and materials storage.*