



Your ref: SSD-77527735

Our ref: DOC24-914890

Pragya Mathema

Environmental Assessment Officer

Department of Planning, Housing and Infrastructure – NSW Planning Group

Via Major Projects Portal: PAE-77538994

Dear Pragya

Subject: Request for Secretary's Environmental Assessment Requirements – Mangoplah BESS (SSD-77527735)

Thank you for your email dated 4 November 2024 seeking advice from the Biodiversity, Conservation and Science Group (BCS) of the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) about the Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for this project.

BCS has reviewed the information supplied. The relevant documents reviewed are:

- Scoping Report - Mangoplah BESS (NGH, October 2024)
- Draft SEARs (DPHI, 2024)
- Determining native vegetation land categorisation for application of the BOS (DPE, 2022)

We provide SEARs for the proposed development in **Attachment A**. Guidance material is listed in **Attachment B**.

BCS recommends that the EIS appropriately address the following:

1. Biodiversity
2. Flood Risk Management

The EIS should fully describe the proposal, the existing environment, and impacts of the development that may impact on flooding and biodiversity. It is important that all conclusions are supported by adequate data. The assessment must include all ancillary infrastructure associated with the project such as roads, water and power supplies, and Rural Fire Service requirements for asset protection.

Biodiversity

Minimum requirements for the biodiversity assessment are listed in Appendix K of the Biodiversity Assessment Method (BAM). Minimum spatial data requirements for the Biodiversity Development Assessment Report (BDAR) submission are listed in Appendix D (Table 7) of the BAM Stage 2 Operational Manual. The Accredited Assessor preparing the BDAR should follow the BDAR template.

Given the proportion of land that has already been cleared in the surrounding region, the proponent must set out how impacts to biodiversity will be avoided and minimised. For example, there is potential to further avoid and minimise harm associated with the proposed access track from Holbrook Road to the Battery Energy Storage System (BESS) site.

The cumulative impact of electricity generation in the surrounding region should be assessed through application of the Cumulative Impact Assessment Guidelines for State Significant Projects.

The BDAR should determine the categorisation of land consistent with the Draft Native Vegetation Regulatory (NVR) map and clause 108(2)(b) of the *Local Land Services Regulation 2014*. For that purpose, critically endangered ecological communities (CEEC) and plants are designated as category 2 - sensitive regulated land.

However, state-wide comprehensive mapping of all CEECs and critically endangered plants is not currently published on the transitional NVR map. The presence of CEECs and/or critically endangered plants must be considered using site-scale surveys to confirm presence/absence of CEECs, regardless of published map products.

For that reason, the BDAR should include a site-based floristic assessment to confirm the presence or absence of critically endangered ecological communities and/or critically endangered plants when determining which NVR map land category applies to the subject land.

The EIS should identify any relevant Matters of National Environmental Significance, and whether the proposal has been referred to the Australian Government or whether it is already determined to be a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999*.

Flood Risk Management

The EIS should address the requirements in **Attachment A** and conduct a quantitative flood impact and risk assessment consistent with the NSW Flood Risk Management Manual (2023) and the Flood Risk Management Guideline LU01.

It is important to define both the impact of flood events on proposed site infrastructure and the impact of the project on flood behaviour, including on waterway crossings for site access.

Given the proximity of the site to local waterways, some degree of flooding across the project site is likely in major events. Flooding at the site is also likely from local intense rainfall events causing major overland flow type flooding. Given this, both riverine and major overland flow flooding needs to be quantitatively assessed in the EIS.

Wagga Wagga City Council is in the process of developing a flood study for the nearby Mangoplah village through the NSW Floodplain Management Program. This flood model will be well advanced by early 2025. BCS recommends the proponent discuss this flood study with Council and seek to utilise the modelling in the quantitative flood impact and risk assessment as part of the EIS.

If you have any questions about this advice, please contact Marcus Wright, Senior Conservation Planning Officer, via planning.southwest@environment.nsw.gov.au or 02 6038 4917.

Yours sincerely



Adam Vey

19 November 2024

Director, South West

Biodiversity, Conservation and Science Group

NSW Department of Climate Change, Energy, the Environment and Water

ATTACHMENT A – Recommended Environmental Assessment Requirements for Mangoplah BESS (SSD-77527735)

ATTACHMENT B – Guidance material

Attachment A

Recommended Environmental Assessment Requirements for Mangoplah BESS (SSD-77527735)

Sources of guidance material for terms in [blue](#) are in Attachment B

Biodiversity
1. Biodiversity impacts related to the proposed development are to be assessed in accordance with Section 7.9 of the Biodiversity Conservation Act 2016 using the Biodiversity Assessment Method (BAM) 2020 and documented in a Biodiversity Development Assessment Report (BDAR) . The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s6.12) , Biodiversity Conservation Regulation 2017 (s6.8) and the BAM, unless it is determined that the proposed development is not likely to have any significant impact on biodiversity values.
2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect, uncertain and prescribed impacts in accordance with the BAM.
3. The BDAR must include details of the measures proposed to address the offset obligation as follows; a. The total number and classes of biodiversity credits required to be retired for the development/project; b. The number and classes of like-for-like biodiversity credits proposed to be retired; c. The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules; d. Any proposal to fund a biodiversity conservation action; e. Any proposal to make a payment to the Biodiversity Conservation Fund. If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.
4. The BDAR must be submitted with all digital spatial data associated with the survey and assessment as per Appendix K of the BAM.
5. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the <i>Biodiversity Conservation Act 2016</i> .

Flood Risk Management
6. The EIS must map the following features relevant to flooding as described in the Flood Risk Management Manual: the policy and manual for flood liable land (NSW Government 2023) including: a. Flood prone land. b. Flood planning area, the area below the flood planning level. c. Hydraulic categorisation (floodways and flood storage areas). d. Flood hazard.
7. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP flood levels and the probable maximum flood, or an equivalent extreme event.
8. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios: a. Current flood behaviour for a range of design events as identified in 7 above. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.
9. Modelling in the EIS must consider and document: a. Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies. b. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood. c. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories. d. Relevant provisions of the Flood Risk Management Manual: the policy and manual for flood liable land (2023).
10. The EIS must assess the impacts on the proposed development on flood behaviour, including: a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure. b. Consistency with Council Floodplain Risk Management Plans. c. Consistency with any Rural Floodplain Management Plans. d. Compatibility with the flood hazard of the land.

- e. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
- f. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
- g. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.
- h. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council.
- i. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council.
- j. Emergency management, evacuation and access, and contingency measures for the development considering the full range of flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES.
- k. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

Attachment B Guidance material

Title	Web address
Relevant Legislation	
<i>Biodiversity Conservation Act 2016</i>	www.legislation.nsw.gov.au/#/view/act/2016/63/full
<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>	www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
<i>Environmental Planning and Assessment Act 1979</i>	https://legislation.nsw.gov.au/view/html/inforce/current/act-1979-203
<u>Biodiversity</u>	
Biodiversity Assessment Method 2020 (DPIE 2020)	https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity-offsets-scheme/accredited-assessors/biodiversity-assessment-method-2020
Biodiversity Assessment Method 2020 Operational Manual – Stage 1 (DPE 2022)	https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-manual-2020-operational-manual-stage-1
Biodiversity Assessment Method 2020 Operational Manual – Stage 2 (DPE 2023)	https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-operational-manual-stage-2
BDAR Template (DPE 2022)	https://www.environment.nsw.gov.au/research-and-publications/publications-search/guidance-for-the-biodiversity-development-assessment-report-template
Biodiversity Offset Scheme guides, tools and databases	https://www2.environment.nsw.gov.au/topics/animals-and-plants/biodiversity-offsets-scheme/maps-systems-and-resources/guides-tools-and-databases
Biodiversity Values Map	www.lmbc.nsw.gov.au/Maps/index.html?viewer=BVMap https://datasets.seed.nsw.gov.au/dataset/biodiversity-values-map
Guidance to assist a decision maker to determine a serious and irreversible impact (DPIE 2019)	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/guidance-decision-makers-determine-serious-irreversible-impact-190511.pdf
Ancillary rules: biodiversity conservation actions	https://www.environment.nsw.gov.au/research-and-publications/publications-search/ancillary-rules-biodiversity-conservation-actions
Ancillary rules: reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules	https://www.environment.nsw.gov.au/research-and-publications/publications-search/ancillary-rules-reasonable-steps-to-sseek-like-for-like-biodiversity-credits

Title	Web address
DPE Threatened Species Profiles	www.environment.nsw.gov.au/threatenedspeciesapp/
BioNet Atlas	www.environment.nsw.gov.au/wildlifeatlas/about.htm
BioNet Vegetation Classification – see NSW Plant Community Type (PCT) classification link for PCT database login page.	http://www.environment.nsw.gov.au/research/Visclassification.htm
NSW SEED Data Portal (access to online spatial data)	https://www.seed.nsw.gov.au/
Fisheries NSW policies and guidelines	https://www.dpi.nsw.gov.au/fishing/habitat/publications/pubs/fish-habitat-conservation
<u>Flood Risk Management</u>	
Flood Risk Management Manual: the policy and manual for flood liable land (2023)	https://www.environment.nsw.gov.au/topics/water/floodplains/floodplain-manual
Australian Rainfall and Runoff: A Guide to Flood Estimation	http://arr.ga.gov.au/
Flood Impact and Risk Assessment, Flood Risk Management Guideline LU01	https://www.environment.nsw.gov.au/research-and-publications/publications-search/flood-impact-and-risk-assessment