

10 June 2026

Contact: *Jack Sharples*
Water NSW ref: D2026/35682

Megan Ramsdale
Department of Planning, Housing and Infrastructure
Locked Bag 5022
PARRAMATTA NSW 2124

Water NSW Response to EIS for Canyonleigh Battery Energy Storage System (SSD-78247462)

Dear Ms Ramsdale

Thank you for your Major Projects Planning Portal referral dated 15 May 2026 regarding our comments on the Environmental Impact Statement (EIS) for the Canyonleigh Battery Energy Storage System (SSD-78247462).

As the development is located within the Sydney Drinking Water Catchment, sections 6.61(1) and 6.63 of the State Environmental Planning Policy (Biodiversity and Conservation) 2021 apply.

Water NSW has reviewed the EIS and associated appendices prepared by ERM Australia Pty Ltd and make the following comments:

- Lithium-Ion Batteries (LIBs) are proposed as part of the BESS, which can present fire, explosion and toxic gas release hazards, which have the potential to impact on water quality. Given the large scale of the Project, WaterNSW considers that any further assessment of the hazards and risks associated with the LIB BESS should consider the history of large wildfires across the project area, and potential water quality impacts associated with LIB BESS fires given the site's proximity to the Wollondilly River and associated tributaries and shall be addressed in the response to submissions (RTS) and/or detailed design.
- No concept design plans have been provided for stormwater quality treatment measures, erosion and sediment controls for construction phase, or proposed crossings / measures of minor drainage lines and other watercourses (both temporary and permanent).
- A single, large bioretention basin is proposed as part of the stormwater treatment system. Bioretention / biofiltration measures are considered unsuitable for rural developments given potential for sediment build-up (particularly with potential erodible soils present), as per Table 5.1 of Water NSW's Current Recommended Practice *Using MUSIC in the Sydney Drinking Water Catchment* (2026). Alternative measures therefore require further consideration, to be developed in consultation with Water NSW as part of detailed design.
- An on-site wastewater system is proposed to be installed during construction and operation phases for the site office (O&M facilities / amenities) and temporary facilities, however no further details have been provided for either phase. The EIS (Water Resource Impact Assessment) states that treated effluent suitable for reuse for construction purposes, which are anticipated to include dust suppression and earthworks conditioning, will be stored in sealed tanks or lined basins to avoid potential interaction with groundwater. Any additional water reuse would require a significantly greater amount of design, treatment barriers and management, compared to on-site effluent land application. Design details and effluent reuse shall be addressed in the RTS and/or during detailed design.

- EIS states that the groundwater table has low to moderate likelihood of being intercepted during construction. The RTS shall address the groundwater management measures if groundwater is intercepted during construction stage.

WaterNSW requests that the following be prepared in consultation with WaterNSW for long-term sustainable water quality management:

- A final Stormwater Management Plan including:
 - details of how potential water quality impacts will be avoided and/or minimised through project design, and route and site selections for the hardstand areas (including that required during the construction phase)
 - details of the site layout including water quality design measures to treat stormwater runoff from the proposed impervious areas such as the BESS (Substation and Battery Energy Storage System – either centralised or decentralised final location/s), building roofs, internal access tracks and hardstand areas, including suitable lower maintenance, alternative measures to the bioretention basin
 - updated MUSIC stormwater quality modelling, to be refined as part of detailed design with alternative options considered, showing a comparison of pre- and post-development scenarios on water quality parameters of key concern (Total Suspended Solids, Total Phosphorus and Total Nitrogen). The modelling should also be consistent with the EIS documentation, particularly for the effective impervious area for access tracks and BESS infrastructure – and should address specific requirements outlined in **Attachment 1**. WaterNSW will require an electronic copy of the revised stormwater quality model, and
 - concept design plans for any stormwater quality treatment measures and required watercourse crossings (both temporary and permanent) including detailed cross sections.
- Conceptual Soil and Water Management Plans for the Construction and Operational Phases of the project, with specific measures to address:
 - the high erosion risk based on any dispersive subsoils across the site including diversion of runoff around the site
 - vegetation clearing and offsets, and specifically measures to avoid and/or mitigate impacts to riparian zones and sensitive vegetation
 - details of the location, size/capacity and design of any proposed onsite storages, including groundwater storage and management plan if intercepted during construction stage; an updated site water balance with high (wet), medium and low (dry) rainfall scenarios for both the construction and operational phases, and
 - design details of any existing erosion control measures (including Catchment Protection Scheme (CPS) works), and any other constraints such as existing erosion gullies. This should also include potential impacts to existing CPS works or gullies due from the proposal and possible mitigation measures.
- The Construction Environmental Management Plan (CEMP) shall be developed to identify site specific controls and procedures to minimise the potential for hydrocarbons and other contaminants being discharged into the environment. In particular this shall include further design details regarding storage of hydrocarbons and other liquid chemicals within an above ground, bunded areas away from watercourses or area subject to high levels of overland sheet flow (flooding risks).
- A suitable Fire Management Plan / design on how the development will address water quality related issues resulting from potential fire risks, such as measures to reduce the risk of bushfire/fire at the site and how these measures may reduce potential water quality impacts, and/or include BESS fire response measures to reduce potential impacts to water quality in the event of a BESS fire. This may include (but not be limited to):

- temporary and / or permanent measures to capture any fire suppression water within the BESS facility, and
- specific management protocols for vegetation fuels throughout Project Area to be maintained in a minimal condition by grazing, or with additional slashing or mowing (as required).
- An Operational Environmental Management Plan (OEMP). The OEMP shall outline and define design details, operation, monitoring, and maintenance of the proposed wastewater management system, stormwater treatment measures and erosion and sediment controls throughout the construction and operation phases of the BESS.

It is requested that Water NSW continue to be listed as a stakeholder for further consultation on the project, and given the opportunity to provide further comment on the response to submissions and any associated draft consent conditions.

If you have any questions, please contact Jack Sharples or Nicole Wallwood via email at environmental.assessments@waternsw.com.au

Yours sincerely



ALISON KNIHA

A/Catchment Protection Manager Transition

Attachment 1 - Requirements for Revised Stormwater Quality Modelling for Detailed Design

- Final design (length/depth /grades) and locations for the proposed grassed swales, biofiltration or natural based systems, and any other proposed stormwater treatment measures required for the development to demonstrate a neutral or beneficial effect (NorBE) on water quality, and shown on any associated Stormwater Management Plans
 - Final details on the modelled effective impervious area for the access roads, BESS infrastructure and facilities and laydown areas, with consistency between the model and associated report. It is noted that the effective imperviousness and land use types used in the modelling provided with the EIS were not sufficiently justified for the proposed development in accordance with *Using MUSIC in Sydney Drinking Water Catchment* (WaterNSW, 2026). For example, industrial land use was used for the O&M facility and construction compounds with 40% imperviousness which may have been better modelled with only the roof area, with land use "Roof" and 100% impervious. The development areas, land use types and imperviousness applied in any revised modelling must reflect the actual proposed development, and be consistent with above guideline and values in the associated report
 - Further, the model should include specific nodes for car park areas and these additional roof areas for proposed buildings (including any ancillary facilities) and should include suitable stormwater measures to manage runoff from these areas. e.g. rainwater tanks.
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