

Memorandum

10 August 2026

To: Bathurst Resources Ltd

From: Craig Vincent

Subject: Review of GHD Stockton Hydrogeology Report

The purpose of this memo is to provide updated review comments on the report titled “Hydrogeology of the Stockton area and the assessment of impacts on groundwater from BPCP Stockton mining activities” prepared by GHD (2026).

Review comments on Revision 1 of the report were provided to GHD on 21 May 2026. Since then, the report has been updated to Revision 2 to incorporate comments and feedback from EMM, legal and Bathurst.

Overall, the report reads well and does a good job of summarising groundwater processes and existing impacts within a mining area which has a complex history of mining and AMD impacts.

The mining, environmental and geological settings are adequately described in Chapters 2 to 4. It is noted that Section 3.5.2 highlights a general lack of groundwater monitoring and spatial coverage across the Stockton area, especially post-2010 where groundwater level data is only available for monitoring bores located close to Mangatini Sump.

Although the hydrogeological setting in Chapter 4 is generally well presented and groundwater recharge and discharge processes are well explained, most of the hydraulic conductivity dataset used in Table 4.1 is not site specific to the Stockton area and has instead been inferred from investigations undertaken at the nearby Cypress and Mount Frederick South areas. This lack of site-specific data presents some risk to the project, although it is likely that hydraulic properties for the different HSUs are similar between Stockton and the surrounding mining areas. The report recommends that additional hydraulic conductivity testing be undertaken within the Stockton area where possible, and this is supported by EMM.

The methodology and assumptions used to estimate groundwater drawdown due to pit dewatering is well documented in Section 4.5.1.

Chapter 5 provides a comprehensive summary of groundwater quality and contamination sources. However, Section 5.6.1 highlights a lack of ‘background’ water quality results within the BCM with only three locations described as having water quality representative of undisturbed material. There is also a lack of monitoring results for the underlying basement rock. Additional proposed monitoring bores are presented in Figure 9.1 and Table 9.3 of the report, and these additional locations are supported by EMM.

The hydrogeological conceptual model presented in Chapter 7 provides a good summary of the likely groundwater processes and flow conditions pre-and during-mining. The conceptual cross-sections are very descriptive.

Chapter 9 provides a comprehensive summary of the potential impacts to groundwater levels and groundwater quality resulting from mining activities. A review of the adequacy of the impact assessment for the Millerton Block is provided in Table 1 below.

Table 1 Assessment of potential impacts to groundwater quantity and quality

Impact	Is potential impact adequately assessed
Potential Impacts to Groundwater Quantity	
Groundwater drawdown and potential reduction of waterway base flows resulting from opencut mining and removal of historical underground workings	Yes. Groundwater drawdown predictions for the proposed opencut pits are described in Section 8.5.2.1, with reference to the methodology in Section 4.5.1 and Figure 4.4. Potential impacts to groundwater dependent ecosystems are described in Section 8.10 with reference to Instream (2026). Predicted reduction of key waterway base flows is summarised in Table 8.4.
Increased groundwater levels and waterway baseflow resulting from fire suppression discharges at Millerton	Yes. Brief description of potential water level mounding due to fire suppression discharges is mentioned in Section 8.5.2.1, although this is very conceptual. It is noted that there is no specific modelling of groundwater impacts due to fire suppression discharges, but it is extremely unlikely this could be done reliably.
Groundwater level changes resulting from land rehabilitation impacts on recharge rates	Yes. Changes resulting from land rehabilitation are described in Section 8.5.2.1, although this is very conceptual.
Potential Impacts to Groundwater quality	
Ongoing fire suppression discharges to underground workings using untreated water from Millerton opencut pit	Yes. Potential impacts to groundwater quality are provided in Section 8.5.3.1.
Highwall and coal floor exposure, and construction of ELF's	

The assessment of potential impacts to groundwater quantity and quality for the other blocks is more straight forward and appears to be adequate. Additional monitoring bores have been recommended to monitor for potential impacts from the SFSF and ELF. Measures to minimise seepage from the SFSF, ELF and PAF waste rock dumps are presented in Section 8.4.

Yours sincerely



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