

## NRAR Quarterly Report 6: Q4 2024

13/01/2025

To: Mia Wilson  
Natural Resources Access Regulator (NRAR)

## Enforceable Undertaking Commitments

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### Water Balance Model (WBM)

The Goldsim WBM has been implemented and reported internally every month which is assisting in guiding a wholistic approach to water management, across the site.

The WBM is also allowing BCOPL to validate water intercepted from undisturbed catchments and forecast when groundwater/river extraction will be required due to low site water storage.

### Proposed Water Metering

As previously mentioned, all metering and telemetry has been installed in accordance with Appendix 1 of the EU and monitoring is ongoing.

### Calculating Water Take

A verification model was run to assess the model's accuracy in representing the rainfall runoff response to the WMS and to estimate the volume of runoff intercepted from the undisturbed catchment in the previous quarter.

The Site Water Balance data in **Figure 1** indicates the modelled storage volume (blue line) is similar to the observed storage volume (orange line). The modelled storage has showed a similar rise to the observed volumes during the year with the model finishing slightly higher than actual storage data.

Slightly below average rainfall for the quarter (Table 1) paired with warmer than average weather led to little runoff from surrounding catchment.

Figure 1: Water Model Run as of 31 December 2024.

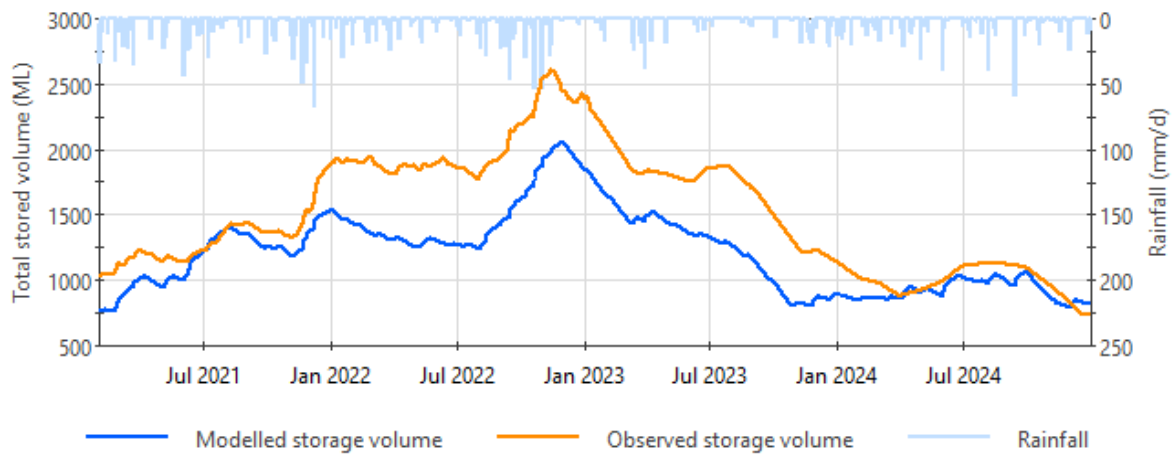


Table 1: Rainfall during reporting period

Month	Rainfall (mm)
October 2024	37.6
November 2024	56.8
December 2024	30.4

Table 2: Estimated &amp; Actual volume of runoff intercepted from soil stockpile dam undisturbed catchment Oct-Dec 2024

	Estimated runoff Volumes into Soil Stockpile dam from undisturbed catchment	Metered pump volumes Actual Interception (Soil Stockpile dam)
Volume (ML)	2.17	0

Due to dry catchment and no significant rainfall events, only small volumes of water were captured in the Soil Stockpile Dam and no pumping occurred.

BCOPL had sufficient licence to account for unregulated water take during the quarter.

*Table 3: Total Licensable take for Oct-Dec 2024*

	Runoff from Third order and higher watercourses	Runoff from minor watercourses	Runoff from minor watercourses in excess of landholdings' harvestable rights
Volume (ML)	8.32	2.97	0

Third order or higher watercourses Bluevale water used WY to date: 55.9ML

Minor Watercourse Bluevale water used WY to date: 19.7ML

### Forecasting water take for acquisition allocation.

A Water Balance Model forecast was run to ensure BCOPL holds sufficient water allocation to account for future surface water take (See figure 2). See results below:

Three-month BOM Climate Outlook January – March 2025: Average

*Table 5: Predicted water take Jan-Mar 2025*

	Predicted Runoff from Third order and higher watercourses	Predicted runoff from minor watercourses	Predicted runoff from minor watercourses in excess of landholdings' harvestable rights	Predicted volume requiring licencing
Volume (ML)	77.01	27.09	0	77.01

Remaining Bluevale licence under WAL44134: 530.1ML

### Industry learnings

- The installation of real-time metering has allowed BCOPL water managers to make real-time decisions around storages and water movement across the site.
- Additional pumping, pipework and filtration installed as part of the process has facilitated the use of dam water in the Coal Processing Plant, thereby reducing the requirement for the use of bore water.
- The real-time storage monitoring will also reduce the need for regular survey pickup of dam storage levels which is a strain on resources and can vary with human error.
- The Goldsim model has provided reliable modelling of our site water storages recently during dry times which has allowed the mine to adequately prepare groundwater bore infrastructure and implement water saving initiatives on site.

## **Surface Water Management Plan (SWMP)**

DPHI approved BCOPL's SWMP on 17 September 2024. A copy was emailed to NRAR on 24 September. The approved SWMP includes relevant information from the Enforceable Undertaking including licencing, metering, telemetry and monitoring requirements. BCOPL is currently reviewing the SWMP to align with the recently approved Modification 8. Once approved, BCOPL will provide a copy to NRAR.

## **Consultation**

Initial consultation has been conducted with members of the local Aboriginal community (25 July 2023) to discuss the background to the Enforceable Undertaking and to commence the discussion on past impact of water take on Aboriginal communities and their cultural practices. Follow up meetings were held in October 2023, January 2024 & June 2024. During the June 24 meeting, a discussion took place around cultural water management on both our mine footprint and offsets. BCOPL has extended an offer to the broader Aboriginal community to visit site for further discussions and to observe landscape flows. Although obligations of the EU have now been met, BCOPL will continue to discuss impact of water take with the ASCF in future meetings.

The next ASCF is planned for February 2025.

A copy of this report will be disseminated to the Registered Aboriginal Parties (RAPs).

Consultation also took place at the November 2024 CCC meeting. No issues were raised.

Figure 2: Predicted licensable water take for Jan-Mar 2025.

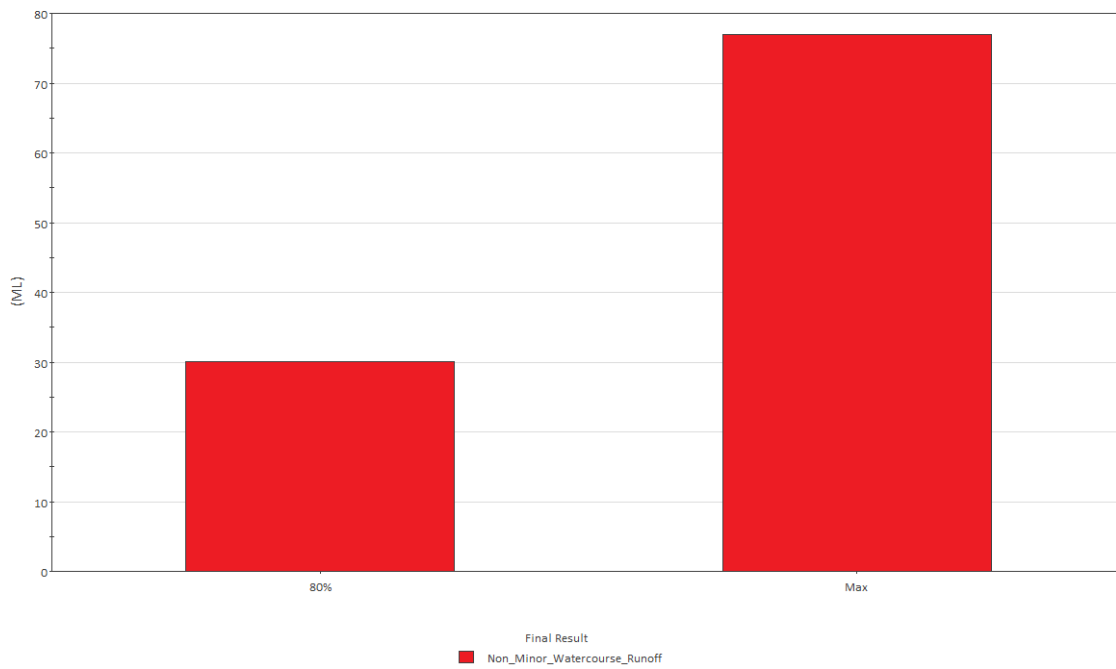
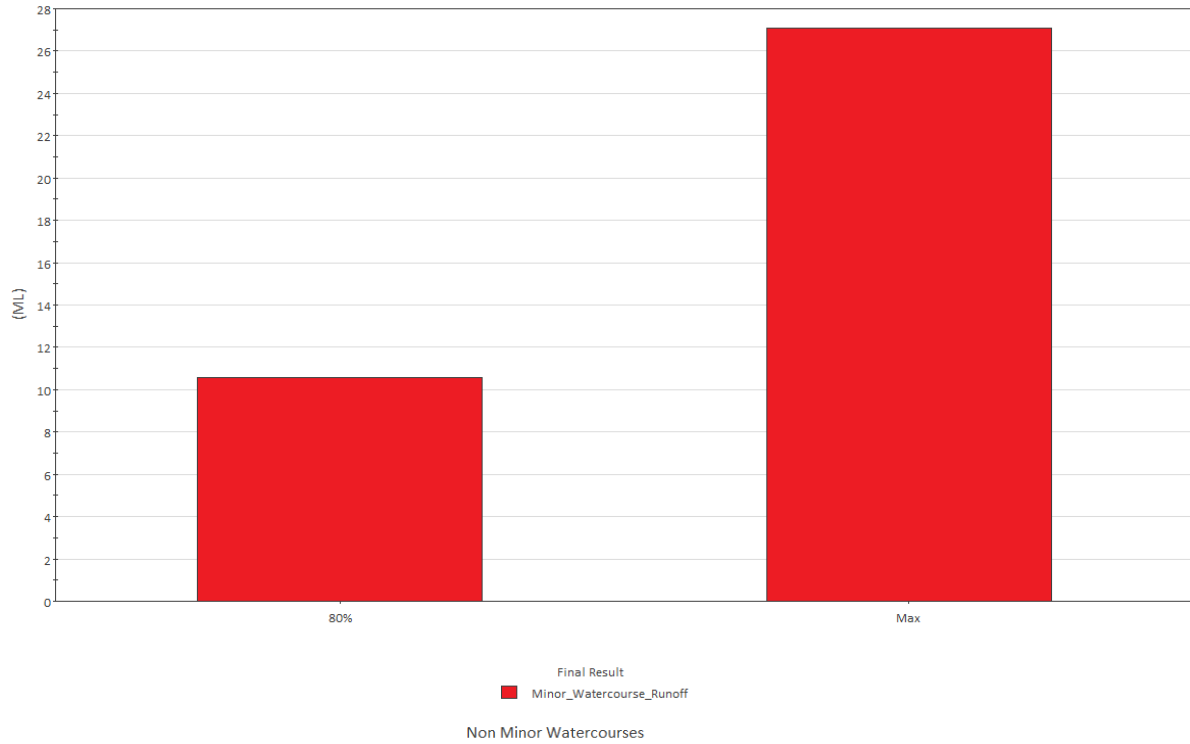
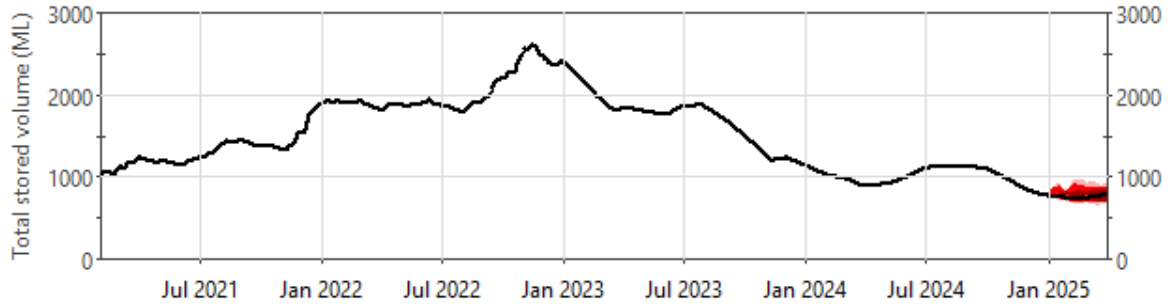


Figure 3: Predicted Site storage Volumes Oct-Dec 2024.



Statistics for Modelled storage volume

