Mt Rawdon Operations

Post Closure Groundwater Modelling

Evolution Mining

Mount Rawdon Operations P/L

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Prepared by:

SLR Consulting Australia

SLR Project No.: 623.030415.00002

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Making Sustainability Happen

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
3.0	31 January 2024	Louis Bouchet	Scott Weeks	Scott Weeks
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Basis of Report

This report has been prepared by SLR Consulting Australia (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Evolution Mining (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

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Executive Summary

SLR was engaged by Evolution Mining to estimate post-closure groundwater levels and assess potential risks to environmental receptors following closure of the Mount Rawdon Operation (MRO).

The MRO is a single open pit located 75km southwest of Bundaberg. Mining started in 2001 and ceased in September 2024. The site, which plans to close in October 2026, will retain three large infrastructures post mining: the final void (or pit), the Tailing Storage Facility (TSF) and the North Waste Rock Dump (NWRD). The TSF and NWRD will be capped to limit rainfall infiltration and potential contamination of groundwater resources.

To estimate post closure groundwater level, SLR updated a 3D transient groundwater model developed by CDM Smith (2024) for the Mt Rawdon Pumped Hydro project (MRPH). The model is a groundwater flow model developed using MODFLOW USG and has been subjected to an independent peer review. The update of the groundwater model involved:

- Model validation: This step involves updating climate and site operation data and running model and then comparing the latest measured data to the model outputs
- Development of a post mining predictive model: Update the model to include the post mining landform and post mining/closure infrastructure.

The updated predictive model was run to 500 years post mining. Predicted groundwater inflows to the pit were provided to the surface water modelling team (SLR, 2025) to inform the Water Balance Model (WBM) for the pit. In return, the WBM provided the predicted water level time series for the pit lake, which was used as a boundary condition (fixed water level) in the groundwater model. Two iterations were required for the alignment of simulation results produced by the WBM and the groundwater model.

Results show that following site closure, groundwater levels will decrease around the mine, primarily due to the capping of the NRWD and the ceased operation/capping of the TSF. The pit is predicted to remain a groundwater sink and as such, contaminant solutes present within the void lake are not predicted to enter the surrounding groundwater. The groundwater located under both the TSF and the NRWD is predicted to travel primarily toward drainage lines within the Perry River catchment, with a small portion flowing toward the final void. Velocities are predicted to reduce significantly once mounding has receded.

There is potential for groundwater expression at the surface along some drainage lines (primarily Twelve Mile Creek). However, leakage rates are expected to reduce over time (i.e. significantly less than today) and to be very low at equilibrium (less than 0.0015 ML/d for the entire model domain) and thus likely to be negligible in comparison to ephemeral surface water flow.

Consultation of the DNRME data set for Groundwater Dependant Ecosystems (GDEs) and private bores indicate that no GDEs or private bores are located within the areas where contaminants may travel. As such, closure impacts on GDE and/or private bores are unlikely.

Finally, climate change has been considered by comparing current trends in rainfall and evaporation with predicted trends using the RCP8.5 scenarios. The data shows that climate change is likely to reduce risk of groundwater expression to the surface, due to a predicted reduction in groundwater recharge rates.

1.0 Introduction

1.1 Site Background

The Mount Rawdon Operation (MRO) is located 75km southwest of Bundaberg. The mine production is from a single open pit, utilising conventional drill and blast, load and haul methodologies. Mining operation started in 2001 under Equigold NL ownership. Since 2011, Evolution Mining has owned and operated the Mt Rawdon mine with open pit operations ceasing in September 2024.

The site main infrastructures includes the Pit, the Tailing Storage Facility (TSF), the North Waste Rock Dump (NWRD), The West Waste Rock Dump (WWRD), several storage and sediment dams as well as roads and offices (**Figure 1-1**).

1.2 Project Background

MRO is wholly owned by Evolution Mining Limited (Evolution) and currently planned to close in October 2026. MRO has engaged SLR Consulting Australia to support the closure planning at MRO.

The objective of this project is to review/update existing site water studies and models (surface water and groundwater models) to inform development of a post mine closure Water Management Plan (WMP) for MRO that will accompany an updated Progressive Rehabilitation and Closure Plan (PRCP) submission.

This technical report presents the groundwater modelling study.

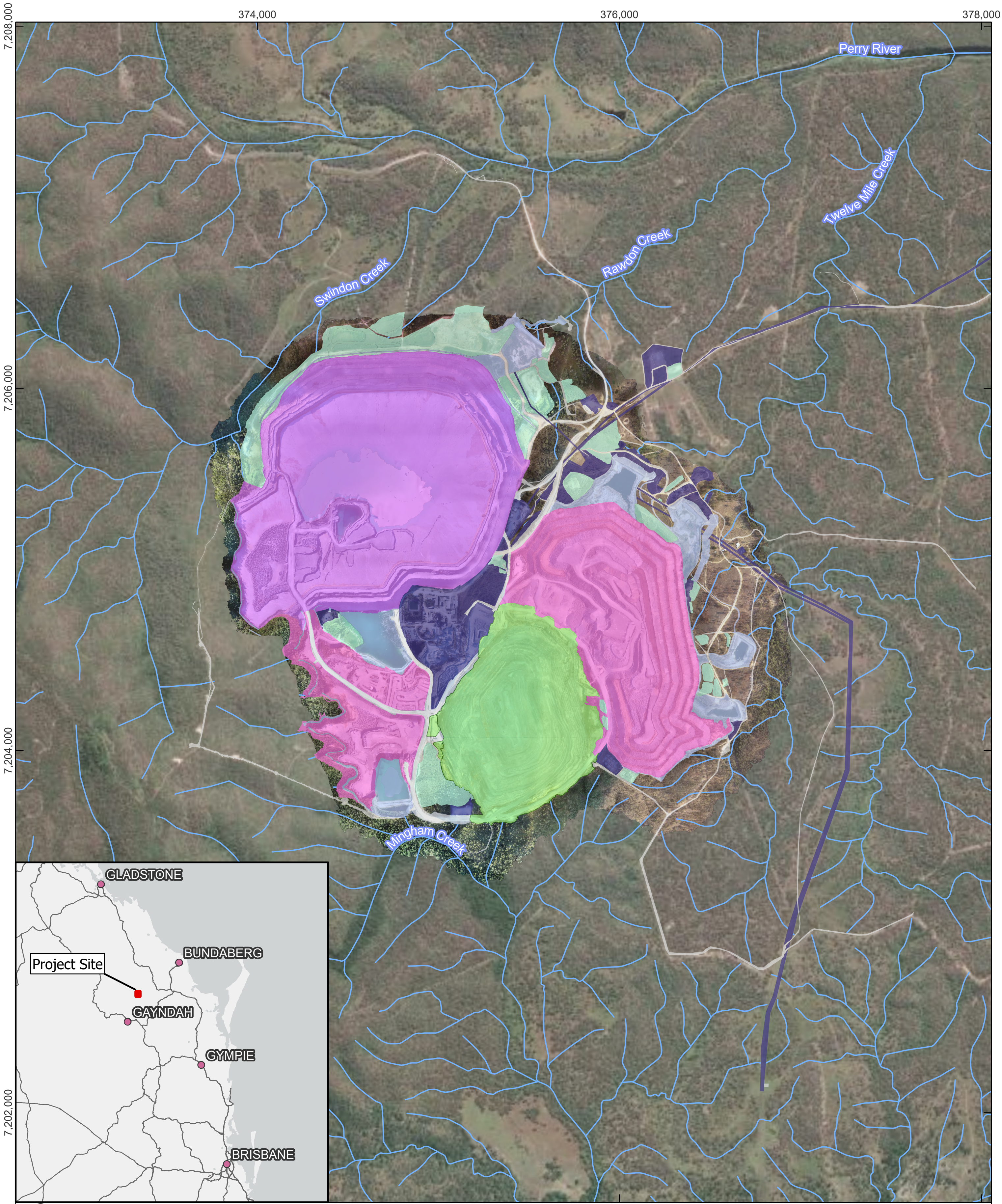
1.3 Groundwater Modelling Study Aim

The aim of the groundwater modelling study is to predict post-closure groundwater levels and assess potential risks to environmental receptors.

1.4 Scope of Works

The scope of work includes:

- Validation of the most up to date groundwater model: This step involves updating climate and site operation data (i.e. dewatering) and running model before comparing the latest measured data with the modelled data
- Update of the site conceptual hydrogeological model for the post mining period
- Development of a post mining predictive model: Update the model to include the post mining landform and post mining/closure infrastructure
- Prediction of groundwater inflow to the final void and iteration with the surface water model to develop a groundwater inflow relationship for the final void.
- Estimation of post-closure (equilibrium) groundwater levels, potential areas of seepage and discharge to creeks; and potential contaminant flow path.



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LEGEND

- Watercourse
- Borrow Pits and Stockpiles
- Infrastructure
- Pit
- Tailings Storage Facility
- Overburden Dump
- Water Storage and Management
- Miscellaneous

MOUNT RAWDON POST CLOSURE

SITE OVERVIEW

SLR

FIGURE 1-1

Path: H:\Projects-SLR\623-TSV\623.030415.00001 Mount Rawdon Operations Post C\06 SLR Data\01 GIS\GIS\MRO_Post_Closure.aprx\623030415_Fig_01_01_Site_Overview

2.0 Conceptual Hydrogeological Model Summary

Detailed conceptual hydrogeological models are provided in SLR (2020) and CDM Smith (2024). A summary of the current and future (post mining) Conceptual Hydrogeological Model (CHM) is provided in this section.

2.1.1 Current

The study area encompasses various geological units, characterized by a thin layer of surface deposits overlaying a fractured rock aquifer. This aquifer contains faults, fracture zones, and dykes, which play a role in influencing groundwater flow regionally.

Due to this geological context, groundwater flow is affected by faults, fissures, and dykes, which can either act as pathways for water movement (areas of higher hydraulic conductivity) or barriers that create flow compartmentalisation.

Groundwater recharge is mainly driven by rainfall infiltration, though this process is thought to be limited. Chloride mass balance analysis conducted by CDM Smith (2024) estimates that regionally, less than 5%, and likely under 1%, of rainfall actually reaches the water table, with the majority lost to evapotranspiration or runoff.

Surface water in the area is typically found in ephemeral creeks, where flow occurs only for brief periods during or after heavy rainfall. Additionally, small waterholes can be found in the Perry River to the north.

Groundwater discharge mostly happens through evapotranspiration in areas where the water table is close to the surface. It can also discharge seasonally into creeks when the water table rises sufficiently. Within the mine, the pit acts a sink to a portion of the local groundwater flow.

Groundwater flow generally follows the terrain, moving from the headwaters of the catchment west of the TSF towards the Perry River via Swindon Creek. A portion of the TSF also drains south toward Mingham Creek via South Dam and West Dam. Seepage from the TSF and NWRD increases groundwater recharge (RPS, 2015), creating groundwater mounds beneath these structures and driving flow toward the Perry River.

2.1.2 Post Mining

After mine closure and rehabilitation activities are completed, the NWRD will have a maximum height of 251mAHD, the WWRD will be removed (returned to pre-mining elevation), the TSF will have a capped maximum elevation of 193mAHD and the final void (pit) will have a maximum depth of -165mAHD.

Groundwater flow post mining is expected to remain generally similar to current, with likely a reduction in water levels within the mining area. This is because:

- Groundwater mounding below the NWRD and the TSF is expected to decline due to ceased operations and capping (i.e. reduced rainfall infiltration)
- Groundwater flow in the vicinity of the pit will be influenced by the pit lake equilibrium level. The final landform includes a small surface water catchment for the pit indicating it is likely to remain a sink to the local groundwater flow post mining.

3.0 Groundwater Model Validation

3.1 Model Background

A 3D transient groundwater model was developed by CDM Smith (2024) for the Mt Rawdon Pumped Hydro project (MRPH). The model is a groundwater flow and transport model developed using MODFLOW USG. The model was peer reviewed by Hugh Middlemis (2023) and deemed fit for the purpose of the MRPH.

The model includes a calibration period (up to 2023) and a prediction period, which includes the mine closure phase and the development and operational phases of the MRPH. The model was calibrated in a stochastic manner, with 100 realisations (i.e. 100 combinations of parameters resulting in a calibrated model). The 100 calibrated realisations have been provided to SLR by CDM Smith.

3.2 Model Update

To verify that the model calibration is still fit for purposes, SLR updated the model (i.e. each realisation) up to July 2024 using the latest climate and site monitoring data (i.e. pumping volumes, depth of pit and groundwater levels).

The following model packages and datasets were updated in the model for the year 2024:

- Recharge package (RCH)
- Evapotranspiration package (EVT)
- Pumping well package (WEL)
- Drain package (DRN)
- Calibration dataset

Additional information for each package/dataset is provided from **Sections 3.2.1** to **3.2.5.**

3.2.1 Recharge

As described in CDM Smith (2024): "*Historical rainfall rates are based on the local MRO weather station data provided by Evolution Mining, spanning between 2013 and 2020. This dataset was extended to cover the simulation period using data from the Mount Perry the Pines weather station (station number 39070) sourced from SILO (2024)".*

The model was updated using SILO data.

3.2.2 Evapotranspiration

Evapotranspiration was setup by CDM Smith (2024) as:

- EVT rate: Transient, using FAO56 potential evapotranspiration rate from SILO.
- EVT extinction depth: Constant, 2 m.
- EVT surface: Transient based on mining activities.

For the calibration period, only the EVT rate was updated based on SILO data.

3.2.3 Dewatering Bores

Pumping data for dewatering bores was updated based on the latest data provided by Evolution. The period April 2023 – July 2024 was updated with measured data. Five newly installed bores were also added: MRMB9, MRMB13, MRMB14, MRMB26 and MRMB27.

3.2.4 Drain

The elevation of the drain cells representing the pit dewatering are varied in the model on a 5-yearly basis starting from 2001 (**Table 3-1**). While updating this model, SLR has updated the period 2024 – 2025 using the July 2024 DEM provided by Evolution (2024).

Table 3-1 Modelled Pit Dewatering Progression – Calibration Period

Year	Stress Period	Minimum Drain Invert Level (m AHD)
2000	1 - 3	NA (No Drain)
2001 - 2007	4 - 16	151
2008 - 2012	17 - 26	71
2013 - 2017	27 - 36	4
2018 - 2022	37 - 46	-73
2023	47 - 48	-140
2024 - 2025	49 - 56	-165

3.2.5 Calibration Dataset

The calibration dataset was updated for all the mine monitoring bores for the period July 2022 to July 2024. Locations with only one datapoint have been excluded from the validation dataset as there is limited confidence in this data which is not part of the site monitoring dataset. The single datapoints originate either from the QLD bore database or were collected as part of the MRPH project (assumed open boreholes). In addition, the majority of these datapoints are located near the planned upper reservoir for the MRPH and are thus of lesser relevance for this study. A total of 28 single datapoints were removed from the calibration dataset.

With the exclusion of the single datapoints, the updated dataset (referred herein as the validation dataset) included an additional 288 datapoints for 78 locations.

The validation data set is summarised in **Appendix A.**

3.3 Validation Methodology

3.3.1 Assessing Calibration Performance

An industry-standard approach for assessing the calibration of a model is to analyse statistics related to the calibration. One way of doing this is by comparing the simulated differential (i.e. error) between the simulated and observed (measured) water levels, which is often expressed as the root mean square (RMS). The RMS value is calculated by taking the square root of the mean of the squared differences between the simulated and observed water levels. In accordance with Barnett et al. (2012), the root mean square (RMS) is considered one of the available options for calculating goodness of fit.

Another option for measuring the goodness of fit is the Scaled Root Mean Squared error (SRMS). SRMS is computed by dividing the RMS by the range of measured heads and expressing it as a percentage. When the goal is to fit historical measurements of water levels, SRMS provides a valuable indicator of the goodness of fit (Barnett et al., 2012). This is primarily due to its ability to compare errors in the simulated values against the total head changes in the system. If the errors are small relative to the total head change, they can be considered negligible.

Although there is no universal recommendation for an acceptable SRMS error, Barnett et al. (2012) suggest that establishing Scaled RMS targets, such as 5 or 10%, may be appropriate in certain circumstances.

3.3.2 Validation Process

The 100 updated realisations were run and the results extracted for validation.

First, the simulated water levels for each of the 100 realisations were compared to the validation dataset (**Section 3.2.5**). All data points have been assigned an equal weight of 1. The realisation with the lowest SRMS was selected as the "best calibrated model".

Second, the performance of the best calibrated model was compared between the original calibration period (up to July 2022) and the updated period (up to July 2024). The magnitude of change in RMS and SRMS was reviewed to assess if the model was still fit for purpose.

3.4 Validation Performance

3.4.1 Best Calibrated Model

A summary of statistical analyses of the error residual between simulated and observed water level elevation for all realisations is provided in **Table 3-2**.

In this study, RMS error calculated for the best calibrated model within the ensemble is 5.9m. The total measured head change across the model domain is 98.1m, leading to a SRMS value of 5.97%. The maximum SRMS value for the ensemble is 6.97%.

The best calibrated model was selected as the model with the lowest SRMS (5.97%) for an RMS of 5.8m.

Table 3-2 Transient Calibration Statistics for All Realisations – Water Levels

Statistic	Min	Median	Max	Best Calibrated
Mean Residual (m)	-2.51	-1.79	-1.09	-1.41
Abs. Residual Mean (m)	3.83	4.015	4.33	3.88
Standard Deviation (m)	5.69	5.985	6.4	5.69
Sum of squares (m^2)	65743.94	74204.83	89515.48	65743.94
Root Mean Square Error (RMS) (m)	5.86	6.225	6.84	5.86
Min Residual (m)	-41.42	-36.835	-31.28	-31.28
Max Residual (m)	15.95	18.65	22.35	19.68
Number of obs.	1915	1915	1915	1915
Range in obs. (m)	98.11	98.11	98.11	98.11
Scaled Standard Deviation (%)	5.80%	6.10%	6.53%	5.80%
Scaled Absolute Mean (%)	3.95%	4.15%	4.42%	3.95%
Scaled RMS (SRMS) (%)	5.97%	6.35%	6.97%	5.97%

*The best calibrated realisation is based on the lowest sum of squares for all measurements in the validation dataset

3.4.2 Validation

Calibration statistics from the updated model were compared to the original model for validation (**Table 3-3**). Overall, the updated model shows an increase in RMS of 0.07m and an increase in SRMS of 0.07%, from 5.90% to 5.97%. These changes are negligeable (less than 1% change). The updated model is still fit for the purpose of this assessment.

The best calibrated model was thus selected to use for prediction. Validation hydrographs are shown on **Appendix B**.

Table 3-3 Calibration Statistic Comparison – Original VS Updated Model

Statistic	Best Calibrated (CDM Smith)	Best Calibrated (Updated Dataset)
Mean Residual (m)	-1.1	-1.41
Abs. Residual Mean (m)	3.85	3.88
Standard Deviation (m)	5.68	5.69
Sum of squares (m^2)	54496.05	65743.94
Root Mean Square Error (RMS) (m)	5.79	5.86
Min Residual (m)	-31.28	-31.28
Max Residual (m)	19.68	19.68
Number of obs.	1627	1915
Range in obs. (m)	98.11	98.11
Scaled Standard Deviation (%)	5.79%	5.80%
Scaled Absolute Mean (%)	3.93%	3.95%
Scaled RMS (SRMS) (%)	5.90%	5.97%

4.0 Groundwater Model Predictions

4.1 Predictive Model Setup

4.1.1 Timing

The predictive model was setup to allow tracking the progressive recovery of water levels in the early stage of the post mining period (smaller stress periods) and to allow the model reaching post mining equilibrium (longer stress periods toward the end of simulation).

Table 4-1 Predictive Model Timing

Date From	Date To	Stress Periods	SP Length
01-07-2024	01-06-2031	51 - 133	Monthly
01-06-2031	01-01-2040	134 - 143	Quarterly to Yearly
01-01-2040	01-01-2545	144 - 163	5 yearly to > 100year

4.1.2 Recharge

As described in CDM Smith (2024): *"For predictive simulation, the period between 1986 and 2005 is defined as the reference period by the Queensland Government (2023). Rainfall rates within this reference period were averaged for the corresponding future stress periods."*

Changes in recharge for mining infrastructure are detailed below.

4.1.3 Evapotranspiration

For the predictive period, the potential evaporation estimates (EVT rate) within the reference period between 1986 and 2005 were averaged for the corresponding future stress periods.

Changes in evapotranspiration for mining infrastructure are detailed below.

4.1.4 Mining Infrastructure

4.1.4.1 Pit Dewatering

The pit dewatering (i.e. drain cells) was turned off in 2026 (**Table 3-1**).

Table 4-2 Modelled Pit Dewatering Progression – Prediction Period

Year	Stress Period	Minimum Drain Invert Level (m AHD)
2024 - 2025	49 - 56	-165
2026 - 2445	57 - 163	NA (No Drain)

4.1.4.2 Final Void

Once mining terminated, the final void was represented by using Constant Head (CHD) cells in lieu of the drain cells (**Table 4-3**). Predicted groundwater inflows to the pit were provided to the surface water modelling team (SLR, 2025) to inform the Water Balance Model (WBM) for the pit. In return, the WBM provided the predicted water level time series for the pit lake, which was used as a boundary condition (CHD) in the groundwater model. Two iterations were required for the alignment of simulation results produced by the WBM and the groundwater model. Daily void levels provided by the WBM have been averaged over each of the model stress period (**Figure 4-1**).

Table 4-3 Modelled Final Void Recovery Progression

Date	Stress Period	EVT_Surface	RCH Factor	CHD Level (m AHD)
2026 - 2445	57 - 163	NA (NO EVT)	NA (NO RCH)	-150 to 38

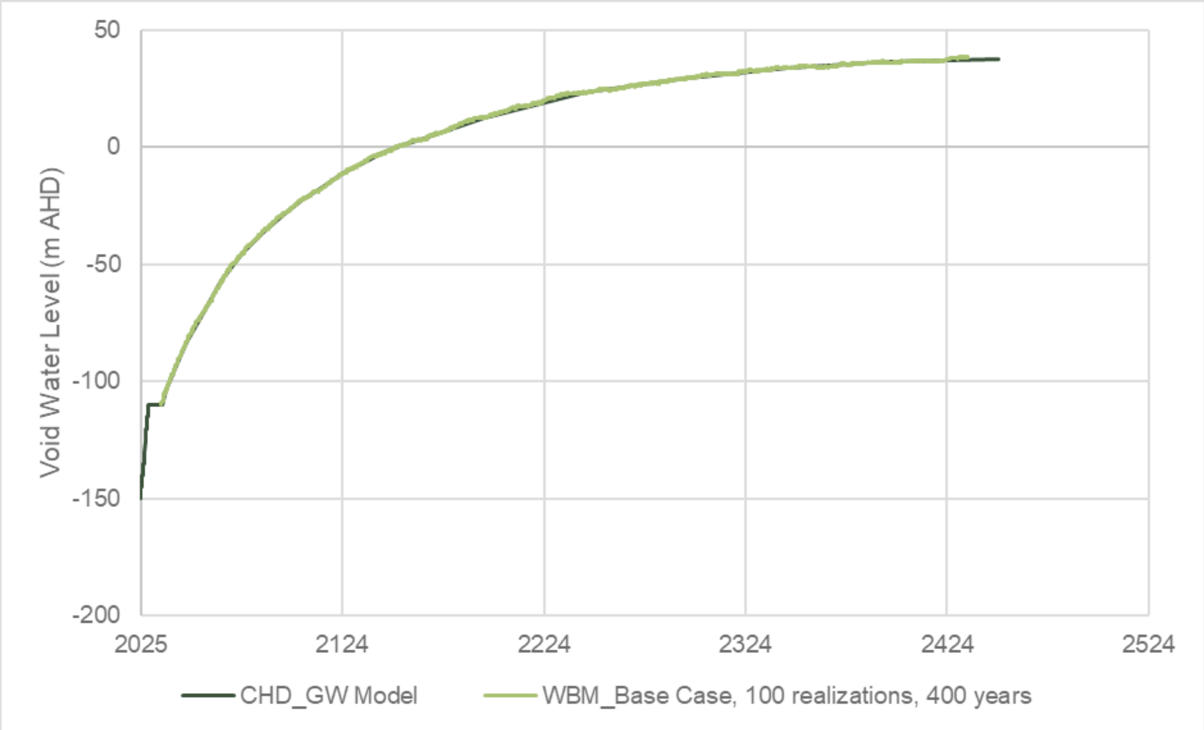


Figure 4-1 Final Void Water Level Results (WBM) and Setup in Groundwater Model

4.1.4.3 NWRD and WWRD

The landform underwent changes due to the construction of the NWRD and WWRD, completed in 2003 and 2014, respectively. These modifications are incorporated into the model by increasing the evapotranspiration surface to align with the altered topography. The materials from the NWRD and WWRD are explicitly included in model layer 1.

For future simulations, the NWRD is assumed to be fully capped by 2035. A study conducted by Okane (2024) estimated infiltration rates to the capping system to be less than 8% of rainfall. The groundwater recharge to the NWRD was thus adjusted to 8% of rainfall from 2035 (**Table 4-4**). Conversely, materials from the WWRD are planned to be repurposed for capping infrastructure such as the TSF and NWRD. The removal of WWRD materials is scheduled for completion by 2035, followed by site revegetation. This is reflected in the model by adjusting groundwater recharge to the background rainfall recharge rate. Additionally, the groundwater evapotranspiration surface is reduced to align with the rehabilitated topography (**Table 4-5**). It is noted that EVT surface is applied from the land surface and as such, vegetation height is irrelevant. As described in **Section 3.2.2**, the FAO56 potential evapotranspiration rate was applied to the entire model domain.

Table 4-4 NWRD – Modelled Changes of Evapotranspiration and Recharge

Date	Stress Period	EVT_Surface	RCH Factor
2000	1	Natural Surface	0.8% (calibrated average)
2003	9	Full extent of structure	18% (calibrated average)
2035	141	Final Landform	8% (Fixed value)

Table 4-5 WWRD – Modelled Changes of Evapotranspiration and Recharge

Date	Stress Period	EVT_Surface	RCH Factor
2000	1	Natural Surface	0.3% (calibrated average)
2014	30	Full extent of structure	9.2% (calibrated average)
2035	141	Natural Surface*	0.3% (calibrated average)

*Final landform = Natural surface

4.1.4.4 TSF

The Tailings Storage Facility (TSF), operational since 2001, is modelled using the MODFLOW River Package. Evolution Mining provided the time-dependent river stage data to represent the TSF pond elevation, while the riverbed elevation was derived from the LIDAR dataset. For conservative modelling, the river cells covering the entire TSF footprint are assigned to model layer 1. The flux across the TSF boundary is controlled by the conductance term, which was calibrated during model development.

The landform changes caused by the TSF construction are incorporated into the model by modifying the groundwater evapotranspiration surface to match the altered topography. TSF materials are explicitly simulated within model layer 1.

For future predictions, processing operations are expected to cease by the end of 2025, and the TSF river cells are deactivated in the model starting in 2026. The model does not simulate the TSF pond's drainage due to limited data. From 2026 to 2035, the TSF is allowed to "drain" naturally. The groundwater evapotranspiration surface is updated to reflect the rehabilitated topography and recharge is re-activated using pre-mining calibrated rates. As described in **Section 3.2.2**, the FAO56 potential evapotranspiration rate was applied to the entire model domain. Post-2035, the TSF is assumed to be fully capped with fine-grained, low-permeability materials. Considering the base of the TSF is made of very fine and compacted tailing material, the net recharge to groundwater under the TSF is likely to be similar or lower than pre-mining calibrated average. The recharge rate post 2035 for the TSF area was thus assumed at 0.1% (similar to pre-mining) of rainfall (**Table 4-6**).

Table 4-6 TSF– Modelled Evapotranspiration, Recharge and River Packages

Date	Stress Period	EVT_Surface	RCH Factor	River Stage Elevation (m AHD)
2000	1 - 2	Natural Surface	0.1% (calibrated average)	NA (No BC)
2001	3 - 65	NA (NO EVT)	NO RCH	141 - 163
2026	66 - 143	Final Landform	0.1% (calibrated average)	NA (Removed BC)
2035	141 - 163	Final Landform	0.1% (Fixed value)	NA (Removed BC)

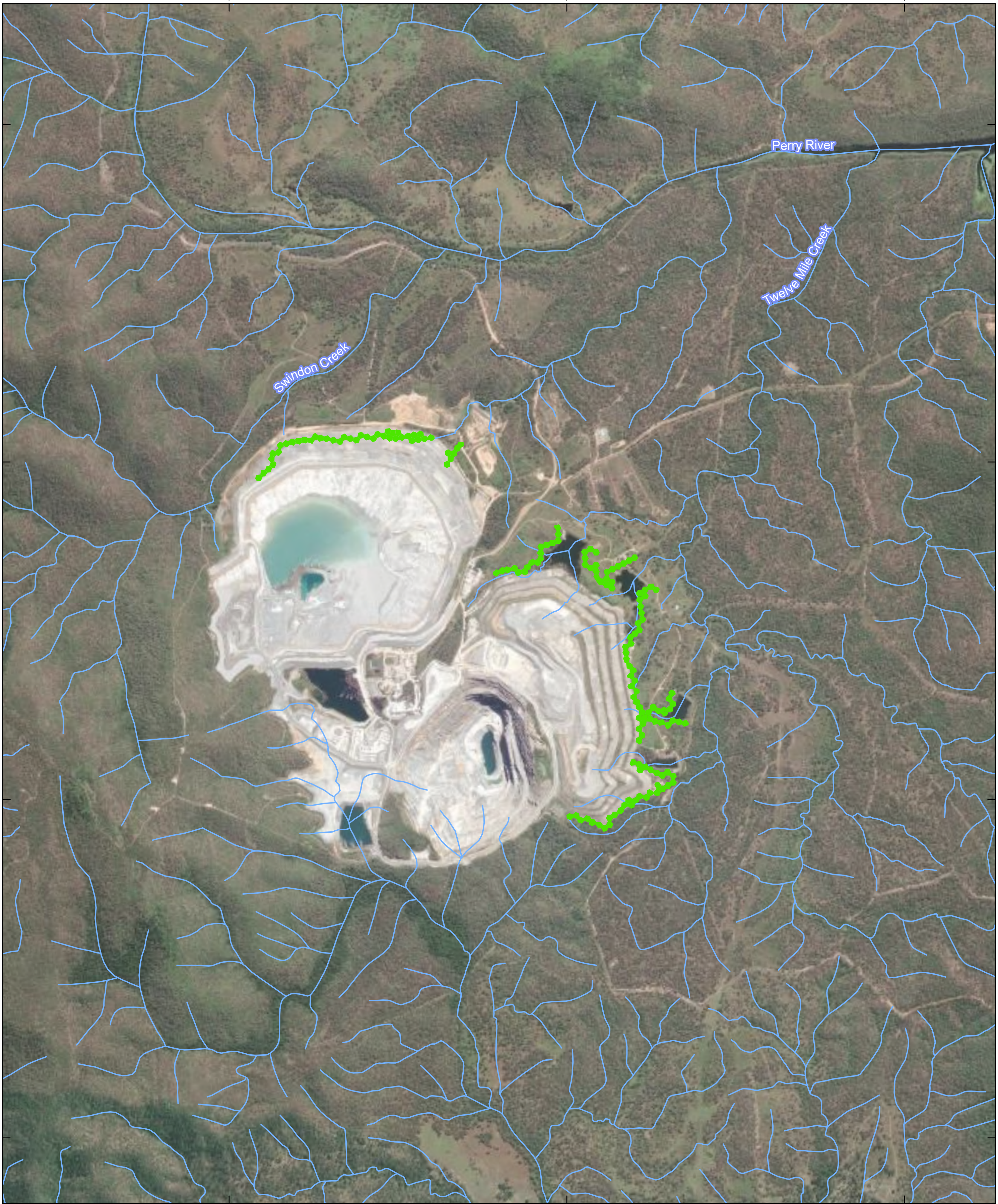
4.1.4.5 Seepage Trenches

There are seepage collection trenches near the TSF, NWRD and WWRD, which are represented in the model using the MODFLOW Drain Package (**Figure 4-2**). Following the previous modelling (NRC, 2018; SLR, 2020), the seepage trench below the TSF embankment is modelled using a drain elevation at 1.5 m below ground level, while the other trenches are modelled using a drain elevation at 4.5 m below ground level. The drain cells representing the trenches are located in model layer 2. The conductance term controls the magnitude of flux across the trench boundary and was estimated through model calibration. For predictive simulation, the seepage trenches are modelled as being operational until the end of 2044.

4.1.4.6 Dewatering Bores

As part of the seepage management plan, Evolution Mining installed several dewatering bores, primarily near the TSF, to control seepage by extracting groundwater. Metered pumping data for these bores, covering the period from 2016 to July 2024, were supplied by Evolution Mining. Up to 15 dewatering bores were included in the historical calibration model using the MODFLOW Well Package.

For predictive scenarios, the model incorporates two additional planned dewatering bores (MRDB11 and MRDB12), bringing the total to 18 bores for future simulations. Evolution Mining provided nominal pumping rates for each bore. These dewatering bores are assumed to remain operational through to the end of 2044.



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LEGEND

Watercourse

Seepage Trench

MOUNT RAWDON POST CLOSURE

LOCATION OF SEEPAGE TRENCHES (MODFLOW DRAIN PACKAGE)

SLR

FIGURE 4-2

4.2 Results

4.2.1 Water Balance

At the start of the recovery period, the pit lake storage (i.e. part of the storage outflow) is primarily fed by the surface water components (represented by the constant head inflow). The contribution from the fractured rock aquifer (storage inflow) also contribute to the void budget. After approximately 400 years post closure, equilibrium conditions are reached: At equilibrium, changes in storage are minimal (<0.01 ML/d) and the largest inflow contributor are recharge (0.48 ML/d) and river leakage (0.43 ML/d). The largest source of outflow is evapotranspiration (0.9 ML/d) (**Figure 4-3**).

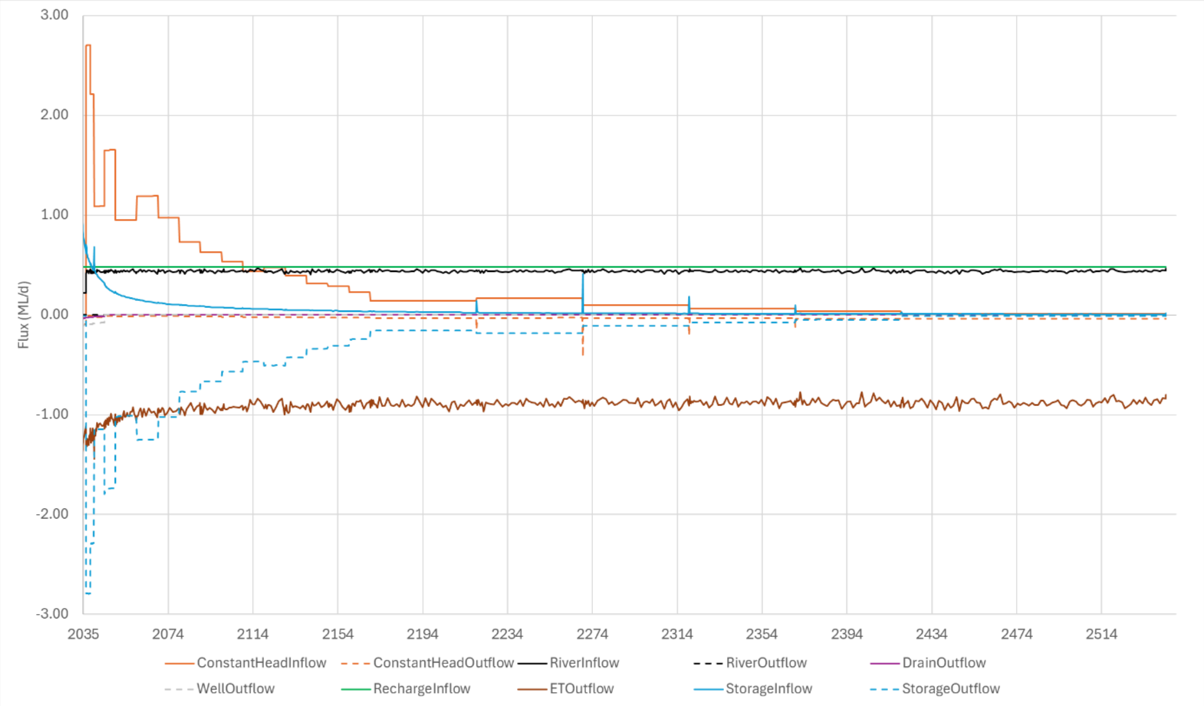
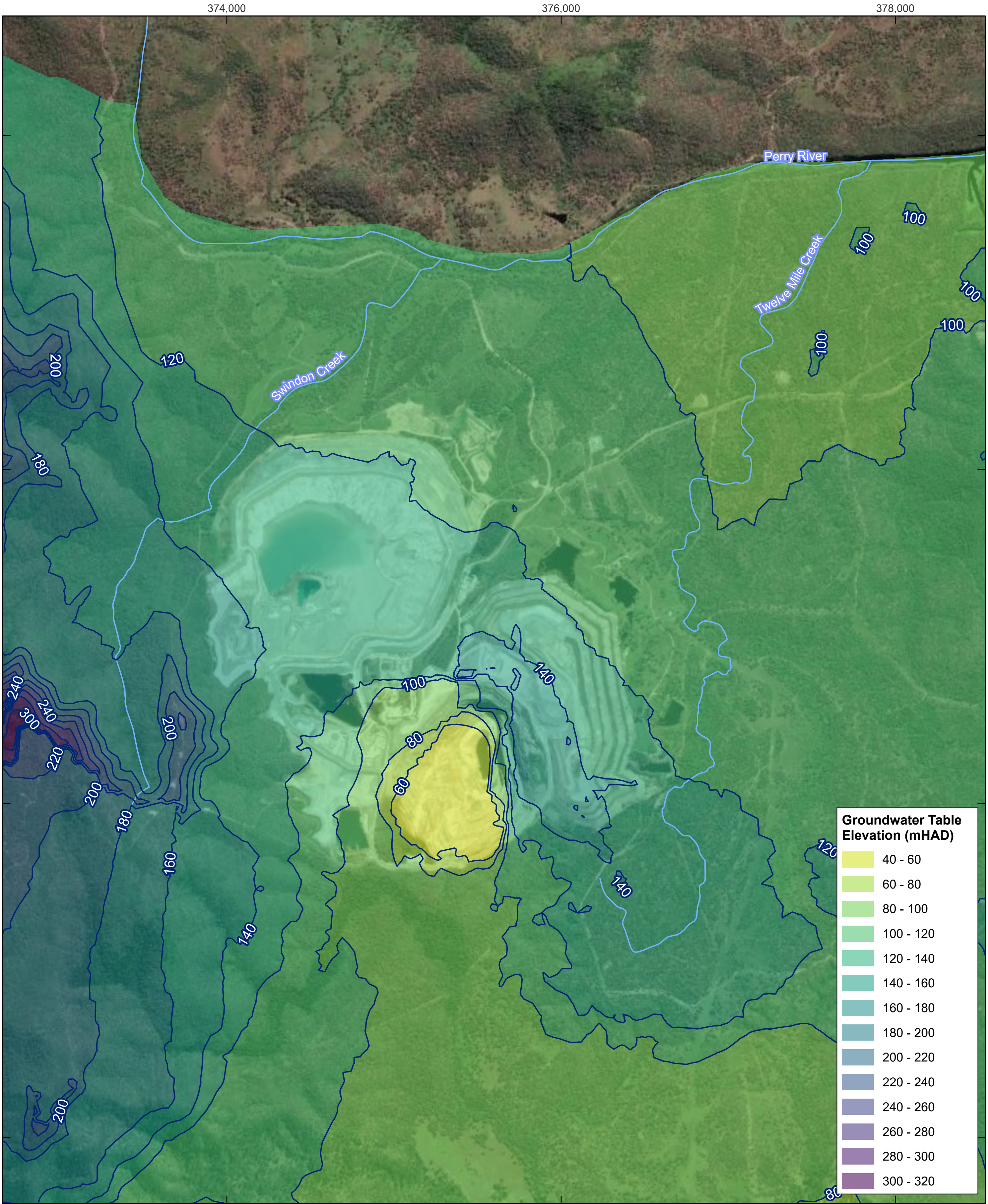


Figure 4-3 Transient Mass Balance – Recovery Period

4.2.2 Post Mining Groundwater Levels and Flow Directions

At equilibrium, the groundwater table elevation contours indicates that shallow groundwater flow within the mine is primarily toward the pit. Two divides exist within the TSF and the NWRD, whereby a portion of the groundwater below each structure reports to the pit and another drains northeast toward the Perry River (**Figure 4-4**).

Groundwater flow within the fractured rock aquifer follows similar patterns than the groundwater table flow. The final elevation of the void lake remains below the base of the fractured rock aquifer as defined in the model (i.e. Layer 5 is dry within the pit as the final void water level is within the basement layer) (**Figure 4-5**).



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LEGEND

Groundwater Contour (mAHD)

Watercourse

MOUNT RAWDON POST CLOSURE

GROUNDWATER TABLE ELEVATION (mAHD) – POST MINING EQUILIBRIUM

SLR

FIGURE 4-4

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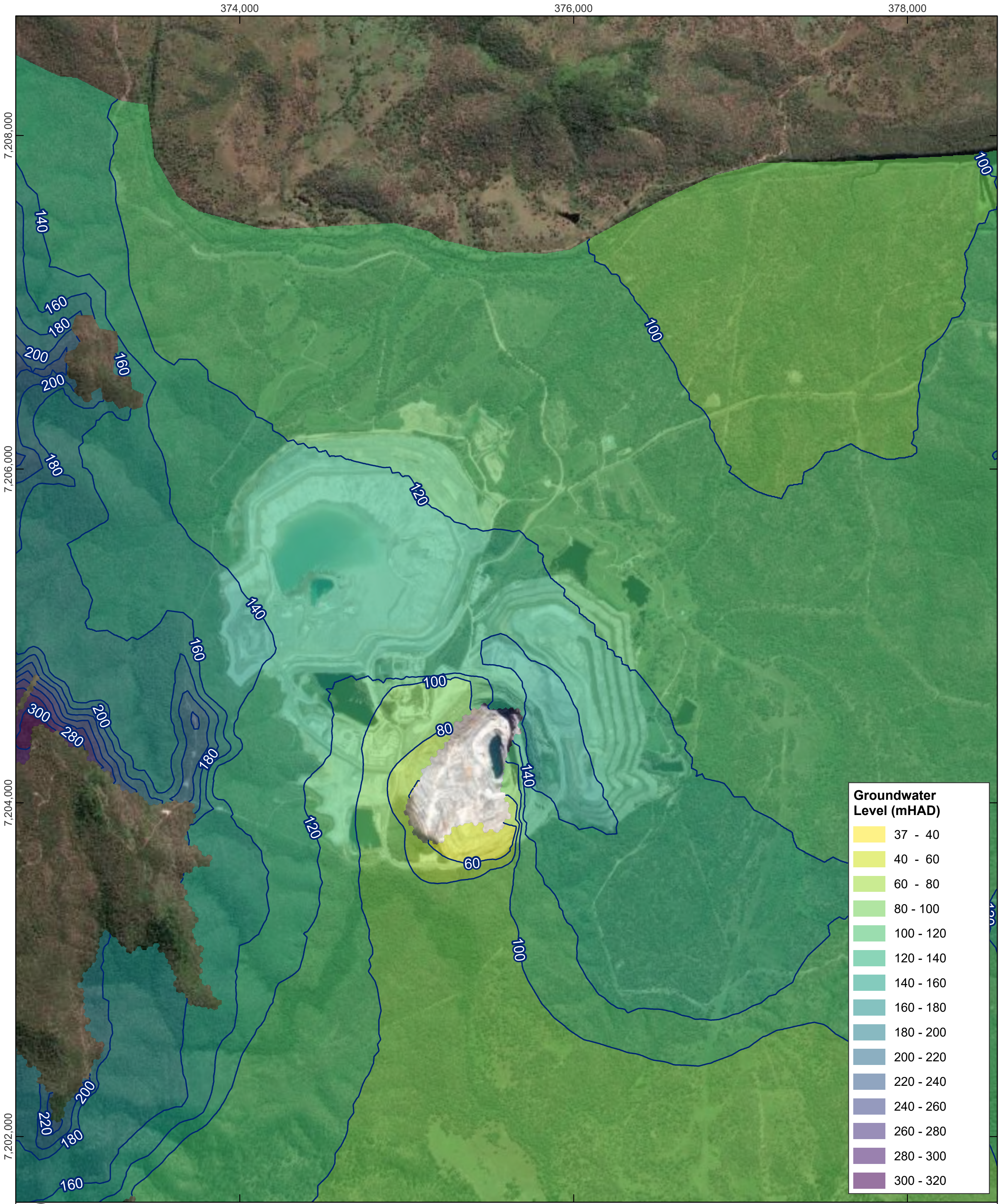

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LEGEND

Groundwater Contour (mAHD)

MOUNT RAWDON POST CLOSURE

GROUNDWATER HEADS (mAHD) FRACTURED ROCK AQUIFER (LAYER5) – POST MINING EQUILIBRIUM

SLR

FIGURE 4-5

Path: H:\Projects-SLR\623-TSV\623.030415.00001 Mount Rawdon Operations Post C\06 SLR Data\01 GIS\GIS\MRO_Post_Closure.aprx\623030415_Fig_04_04_GWH Layer 5

4.2.3 Potential Groundwater Expression

Groundwater expression at surface may occur in areas where the groundwater table is simulated to recover at an elevation close to the surface. Potential areas of groundwater expression near the mine are associated with the surface drainages (**Figure 4-6**).The depth to groundwater contours map indicates that the groundwater table is located on average 30 m below the TSF surface and 70 m below the NWRD.

To quantify the volume of groundwater predicted to seep out via surface drainages, Zonebudget was used. Zonebudget is a MODFLOW utility that allows quantifying the fluxes between defined zones and/or boundary conditions. The creek systems have been divided into 11 zones and the fluxes have been assessed for each zone as the net outflow at the river cells. **Figure 4-7** shows the creek zones for which the net baseflow is > 0 KL/d. Following the removal of the TSF lake in 2026, there is a rapid reduction in groundwater baseflow for Swindon Creek, Twelve Mile Creek and Mingham Creek. Further decrease occurs following capping of the TSF and NWRD and decommissioning of the WWRD.

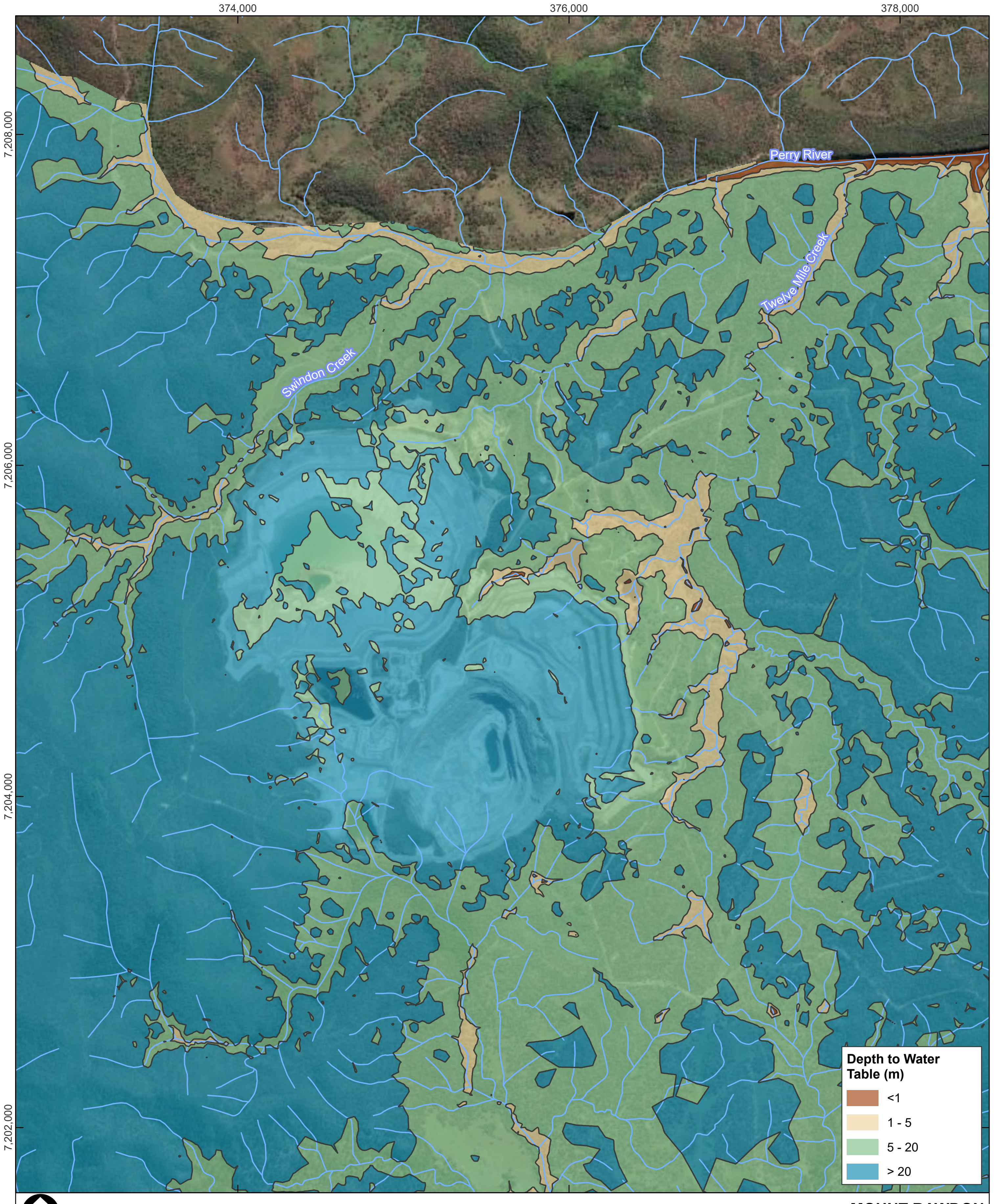
Groundwater baseflow is thus predicted to reduce significantly post closure, with Mingham Creek and Swindon Creek predicted to receive no baseflow from groundwater at equilibrium. Middle Creek is predicted to see a 20% reduction (from approximately 1.7 KL/d in 2024 to 1.3 KL/d in 2545) while Twelve Mile Creek is predicted to see a 99% reduction (from approximately 25 KL/d in 2024 to 0.2 KL/d in 2545).

Groundwater baseflow is predicted to be less than 1.3 KL/d (475 KL/yr) for any creek zones after 2035 (**Figure 4-7**). This is likely to represent less than 1% of the yearly rainfall runoff as illustrated for Twelve Mile Creek in **Table 4-7**.

Table 4-7 Yearly Surface Water Runoff Estimates - Twelve Miles Creek

Catchment Area[1] (m2)	Yearly Rainfall (m)	Minimum runoff[2](m) (10% rainfall)	Yearly Surface Runoff (KL)
10,000,000	0.8	0.08	800,000

[1]Approximation; [2] Assumed minimum runoff to creek



Coordinate System:	GDA2020 MGA Zone 56
Scale:	1:30,000 at A4
Project Number:	623.030415
Date Drawn:	15-Jan-2025
Drawn by:	NT

LEGEND

Depth to Wate Table (m)

Watercourse

MOUNT RAWDON POST CLOSURE

DEPTH TO WATER TABLE (m) – POST MINING EQUILIBRIUM

SLR

FIGURE 4-6

Path: H:\Projects-SLR\623-TSV\623.030415.00001 Mount Rawdon Operations Post C\06 SLR Data\01 GIS\GIS\MRO_Post_Closure.aprx\623030415_Fig_04_05_Depth to GWT

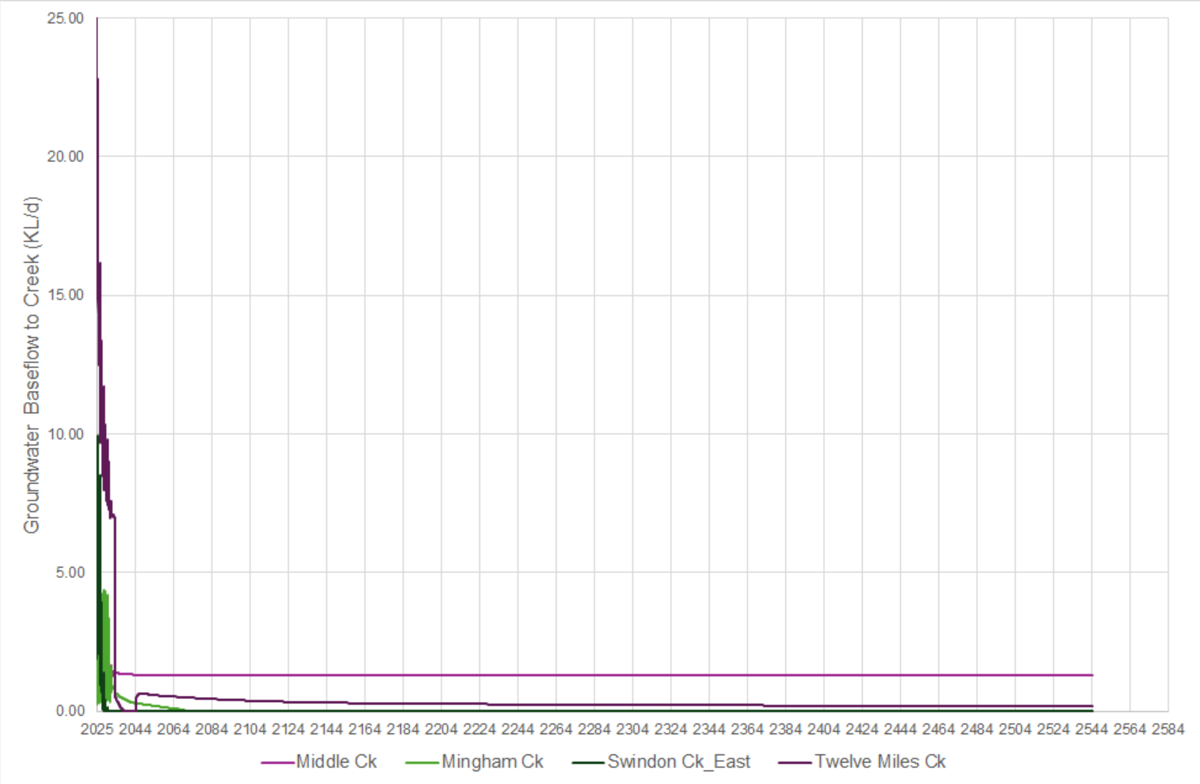


Figure 4-7 Predicted Groundwater Baseflow to Creek

4.2.4 Final Void Inflows

Groundwater net inflow to the final void slowly decreases with time as the void lake stage increases. The net void inflow decreases from 0.2 ML/d in 2025 down to 0.04 ML/d in 2545 (**Figure 4-8**). The void is a strong "sink", which means that groundwater flow is toward the void, with virtually no outflow from the void to the surrounding groundwater (**Table 4-8**).

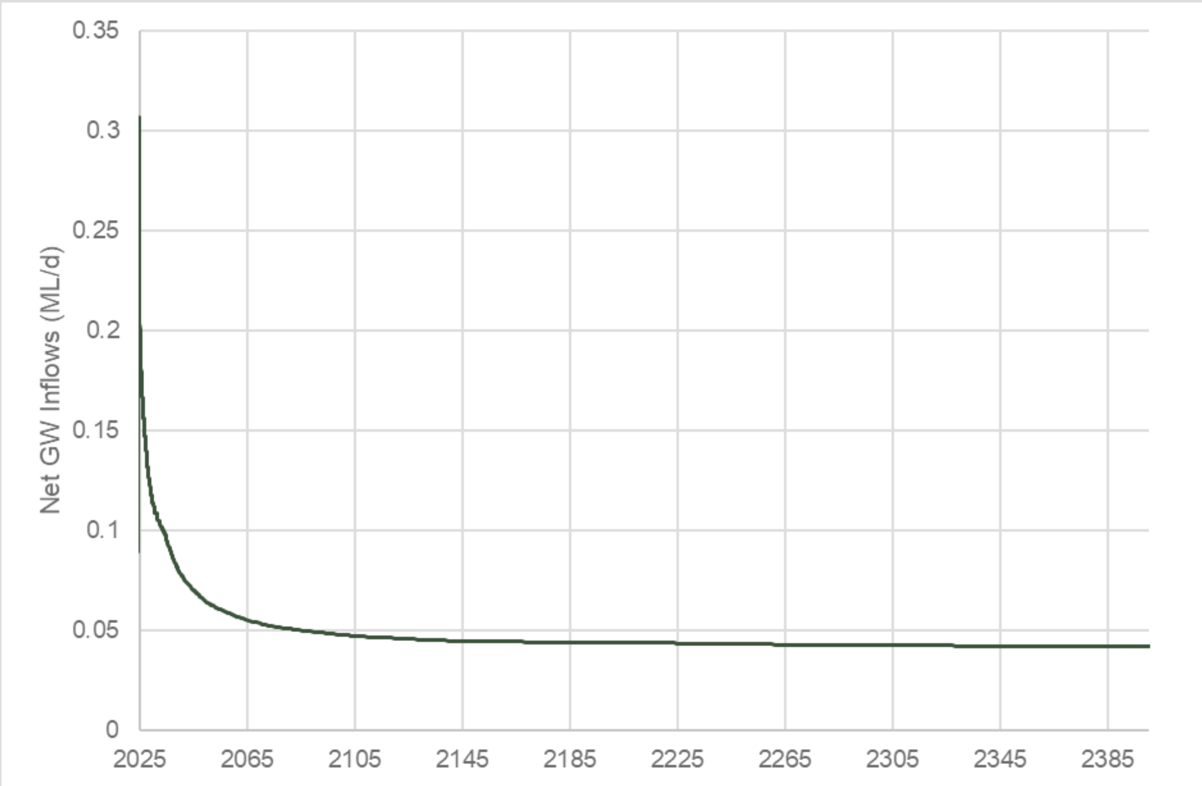


Figure 4-8 Simulated Groundwater Net Inflow to Final Void

Table 4-8 Post Mining Equilibrium Final Void Inflow

Groundwater flow component	Flux (ML/d)
Post Mining Equilibrium Groundwater outflow to Groundwater	< 0.001
Post Mining Equilibrium Groundwater inflow to pit	0.042
Post Mining Equilibrium Groundwater Net Flow to pit	0.041

4.3 Contaminant Flow Pathways (Particle Tracking)

4.3.1 Methodology

To assess potential contaminant flow pathways, particle tracking post-processing was undertaken using the mod-PATH3DU version 2.0 software (S.S. Papadopulos & Associates, Inc, 2022). The mod-PATH3DU software is often used in conjunction with groundwater flow and transport models, such as the MODFLOW family of programs, to understand the flow paths and movement of contaminants or solutes in groundwater systems.

Mod-PATH3DU doesn’t simulate groundwater flow itself; it relies on flow data from a compatible flow model. The flow model provides information about the direction and velocity of groundwater flow at different points in the aquifer.

Mod-PATH3DU works by releasing particles (simulated particles) at specified starting points within the aquifer. These particles are then tracked through successive time steps based on the flow information obtained from the numerical flow model. The particles move along the calculated flow paths, and their positions are updated at each time step according to the local flow velocities. The tracked particle paths can be visualized using various techniques, such as particle traces or path lines.

Limitations of mod-PATH3DU include:

- Sensitivity to flow model uncertainty: mod-PATH3DU's accuracy heavily depends on the accuracy of the underlying flow model. If the flow model has uncertainties or inaccuracies in representing the actual groundwater flow, the particle tracking results may be compromised.
- Assumptions and simplifications: mod-PATH3DU involves simplifications and assumptions. For this project, mod-PATH3DU was setup without dispersion, which might not accurately represent real-world conditions in complex aquifers. Moreover, mod-PATH3DU doesn't incorporate complex biogeochemical reactions or detailed contaminant transport processes. This limits its use in scenarios where detailed chemical reactions are important.

One required input for mod-PATH3DU is the elevation within each cell, z, which is transformed into a local coordinate system, z_L, herein referred to as the ZOffset. This ZOffset ranges from 0 at the base of a cell up to 1 at either the top of the cell or water table elevation. Throughout simulation, the vertical movement of a particle may be tracked through this by scaling the vertical velocity with the saturated thickness of the cell, provided z_L is updated whenever the particle changes layer (S.S. Papadopulos & Associates, Inc, 2022).

Starting particles have been placed within layer 1 with a ZOffset of 0.5, effectively starting particles in the middle of the water column in the upmost saturated layer (i.e. near water table elevation). Particles have been placed at the periphery and in the centre of the NWRD, TSF and final void.

mod-PATH3DU can track particles until they reach either the end of the groundwater model simulation time or the final end point (termination). When tracking to termination, particles in the group on the last time step are tracked until each particle terminates at a boundary or is removed by reaching a stagnation point. If a particle reaches a final end point before the end of the simulation time, the final location is recorded along with the cause of termination.

For this assessment, two scenarios have been simulated to visualise the difference between current flow paths (closure conditions) and flow paths once the system is at equilibrium:

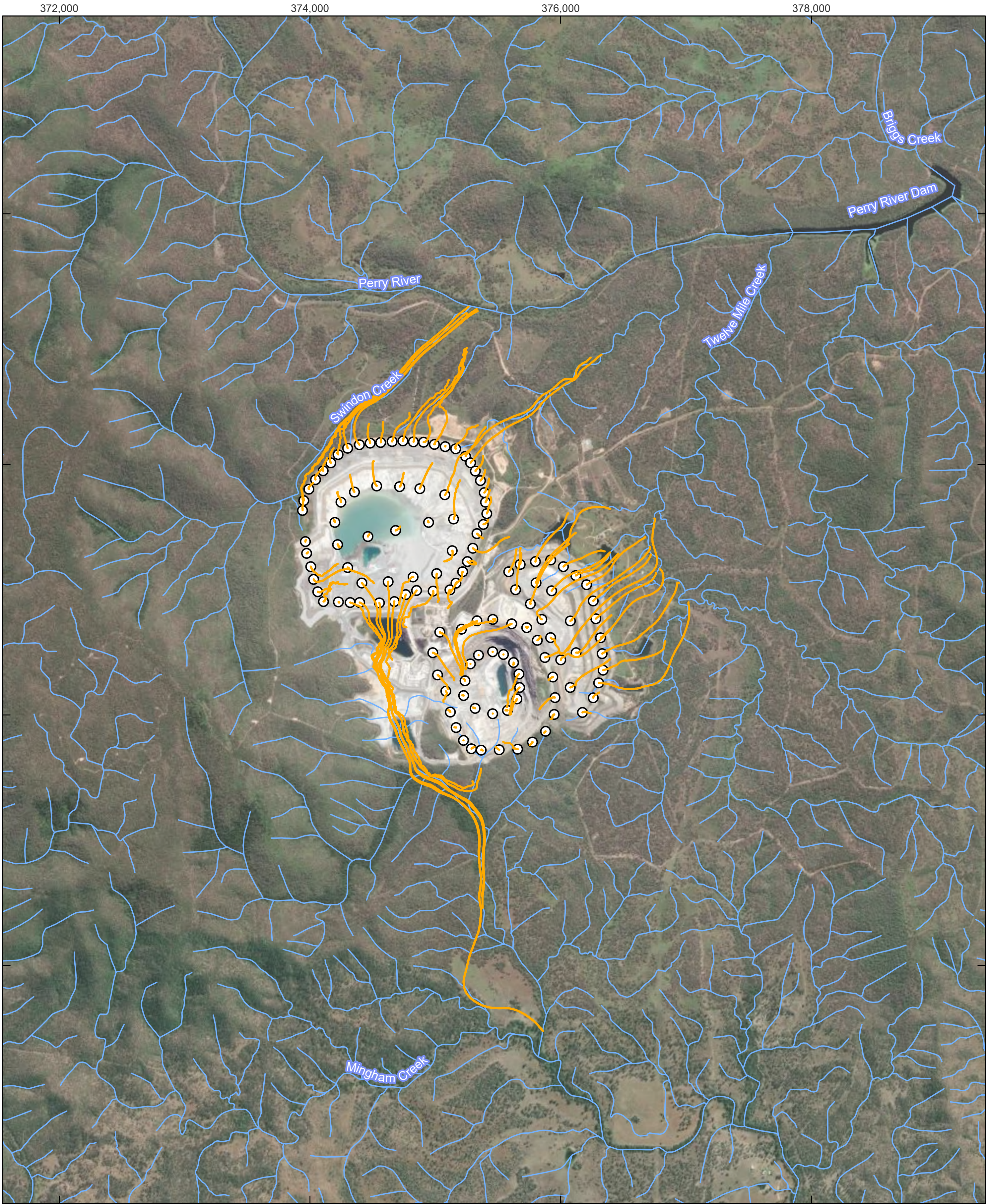
1. **Closure conditions and beyond:** Particles are released at the end of the closure period (2040) and tracked until the end of simulation (2545)
2. **Equilibrium conditions and beyond**: Particles are released when the system is near equilibrium (2400) and until the end of simulation (2545)

4.3.2 Results

4.3.2.1 Final Void

The final void is a sink to the surrounding groundwater for both current and post mining conditions (**Figure 4-9** and **Figure 4-10**):

- Particles originating from the final void lake do not migrate out of the final void
- Particles originating from the final void edge are captured by the final void or appear near stationary.



Coordinate System: GDA2020 MGA Zone 56
Scale: 1:40,000 at A4
Project Number: 623.030415
Date Drawn: 20-Dec-2024
Drawn by: NT

LEGEND

- Starting Location
- Particle Flow Path
- Watercourse

MOUNT RAWDON POST CLOSURE

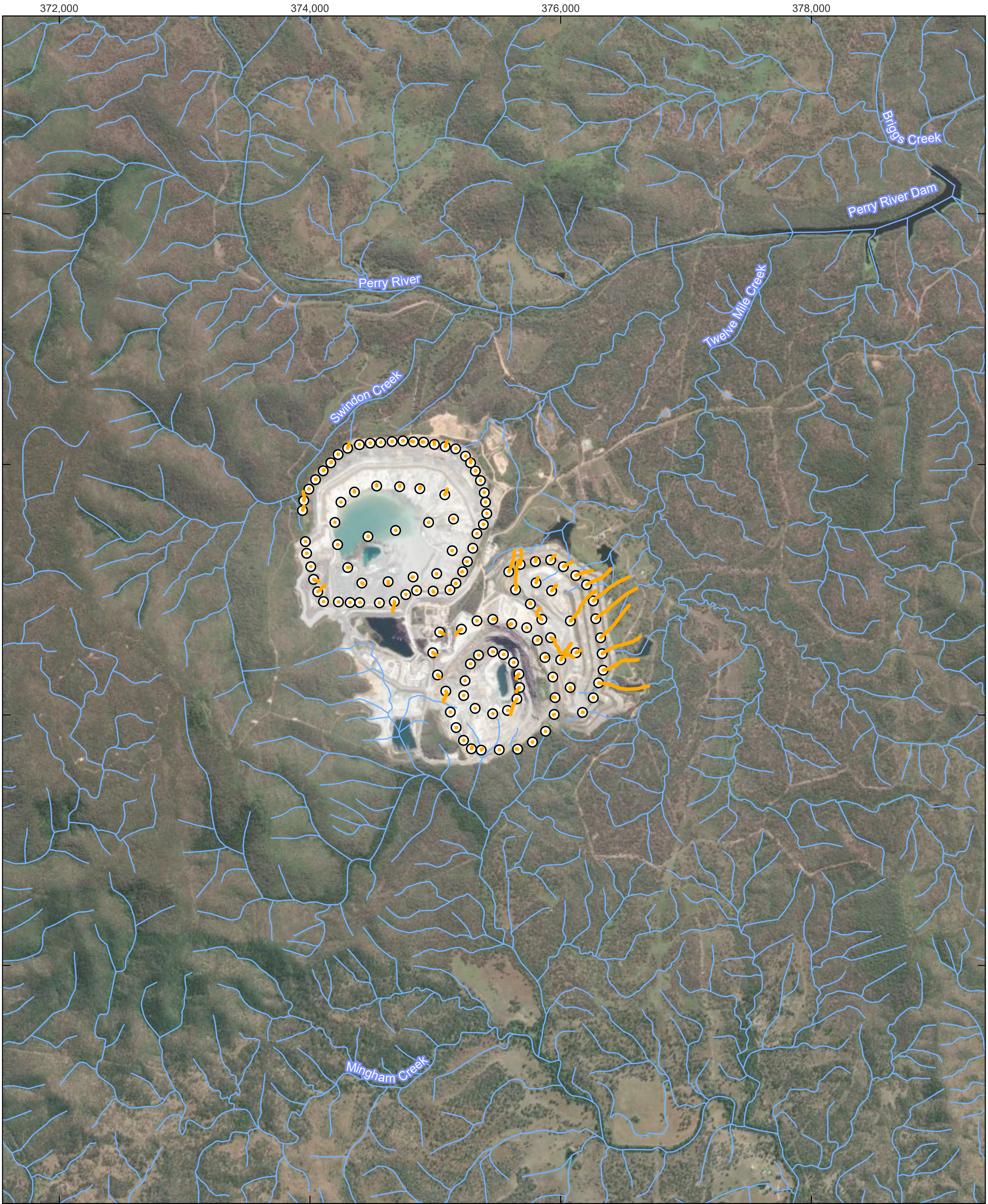
PARTICLE TRACKING FROM 2040 TO 2540 (500 YEARS FROM CLOSURE)

SLR

DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.

FIGURE 4-9

Path: H:\Projects-SLR\623-TSV\623.030415.00001 Mount Rawdon Operations Post C\06 SLR Data\01 GIS\GIS\MRO_Post_Closure.aprx\623030415_Fig_04_07_PT from 2040 to 2540



Coordinate System: GDA2020 MGA Zone 56

Scale: 1:40,000 at A4

Project Number: 623.030415

Date Drawn: 20-Dec-2024

Drawn by: NT

LEGEND

- Starting Location
- Particle Flow Path
- Watercourse

MOUNT RAWDON POST CLOSURE

PARTICLE TRACKING FROM 2395 TO 2545 (150 YEARS FOLLOWING EQUILIBRIUM)

SLR

FIGURE 4-10

Path: H:\Projects-SLR\623-TSV\623.030415.00001 Mount Rawdon Operations Post C\06 SLR Data\01 GIS\GIS\MRO_Post_Closure.aprx\623030415_Fig_04_08_PT From 2345 to 2545

4.3.2.2 NWRD

Groundwater beneath the NWRD will flow toward the final void and Twelve Mile Creek for both current and post mining conditions (**Figure 4-9** and **Figure 4-10**). At equilibrium, the velocity will be reduced to less than 2.5m per year (once mounding under the NWRD has reduced):

- Most particles originating from the NWRD travel towards Twelve Mile Creek with a few traveling toward the pit
- Travel time will be slow at equilibrium (less than 2.5 m per year) compared to current conditions (up to 15 m per year).

4.3.2.3 TSF

Groundwater originating from under the TSF will initially migrate toward the Perry River, the final void and Mingham Creek (**Figure 4-9** and **Figure 4-10**). At equilibrium, the velocity will be reduced to less than 0.5 m per year and the entire site will drain toward the Perry River

- Particles originating from the northern and north-eastern part of the TSF embankment will travel toward the Perry River. Travel time to reach the Perry River varies from up to 5 m per year under current conditions down to less than 0.5 m per year at equilibrium.
- Particles originating from the eastern part of the TSF embankment will travel toward Twelve Mile Creek. Travel time to reach the creek varies from up to 5 m per year under current conditions down to less than 0.5 m per year at equilibrium.
- Particles originating from the southern part of the TSF embankment will mostly travel toward the final void. A small portion is predicted to bypass the void and travel toward Mingham Creek. Travel rate to reach the creek is currently estimated at 17.5 m per year. At equilibrium, the entire TSF area will either drain toward the north or the final void, not toward Mingham Creek.

4.3.3 Discussion

Particle tracking indicates that groundwater originating from mine infrastructures will travel toward surface drainages, where it may express in areas where the water table is greater than adjacent creeks bed.

The actual risk of contamination to surface waters is however limited, due to the small amount of predicted groundwater baseflow. As discussed in **Section 4.2.3**, groundwater baseflow is predicted to be less than 1.3 KL/d at all creek zones after 2035. This is likely to represent less than 1% of the surface water flow. As such any contaminant discharging into the creeks should see its concentration divided by a factor of at least 100 by the time it reaches the Perry River.

5.0 Conclusion

5.1.1 Post Mining Groundwater Conditions

Following the closure period (2025 – 2040), and capping of the NWRD and the TSF, groundwater levels under the NRWD and the TSF will recede. The pit, which is currently a sink to the surrounding groundwater will remain a sink post mining.

The majority of the site will drain north, toward the Perry River. During the recovery period (i.e. before 2400), a potential flow path may exist between the southwestern edge of the TSF and the Mingham Creek catchment. At equilibrium, hydraulic gradient around the TSF will be reduced and the entire site is predicted to drain toward the Perry River or the final void.

5.1.2 Potential Contaminant Transport

The pit lake is predicted to remain a sink and as such, contaminant solutes present within the void lake are not predicted to enter the surrounding groundwater. The groundwater located under both the TSF and the NRWD is predicted to travel primarily toward drainage lines within the Perry River catchment, with a small portion flowing toward the final void. Velocities will reduce significantly once mounding has receded.

Potential risks to groundwater will depend on several chemical and geochemical factors such as contaminant concentration at the source, leakage rates and geochemical reactions along the flow path. There is potential for some groundwater expression at the surface along some drainage lines (primarily Twelve Mile Creek). However, leakage rates are expected to be very low at equilibrium (0.0015 ML/d for the entire model domain) and thus likely to be negligible in comparison to ephemeral surface water flow.

5.1.3 Impact on Environmental Receptors

Consultation of the DNRME data set for Groundwater Dependant Ecosystems (GDEs) indicate that no GDEs are located within the areas where contaminants may travel. The closest GDE identified is a surface water GDE associated with the Sunday Creek, about 8km upstream of the ML. Post closure impacts on GDE are thus unlikely.

The DNRME data set for registered bores indicates that no private bores are located with 8km downstream from the pit. Post closure impacts on landholder bores are thus unlikely.

5.1.4 Climate Change Considerations

Groundwater recharge (rainfall infiltration) and leakage from the Perry River are the key drivers for groundwater “inflows” (see **Section 4.2.1**). Under the RCP 8.5 scenarios, average yearly rainfall is predicted to decrease, while average yearly evaporation is predicted to increase (**Table 5-1**). As such, the net inflow to the groundwater system is likely to be reduced in the future, which will lead to lower groundwater levels regionally. This would reduce the potential volume of contaminated groundwater expressing as baseflow to creeks (assessed in **Section 4.2.3**) and thus reduce the overall risk to environmental receptors.

Table 5-1 Predicted Annual Rainfall and Evaporation (SLR, 2025)

Climate Scenario	Annual Rainfall (mm)	Annual Evaporation (mm)
Base Case (2070-2234)	847	1770
RCP 8.5 HP (2070-2234)	738	1939
RCP 8.5 WI (2070-2234)	814	1903

6.0 References

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SLR. (2025). Post Closure Water Balance Assessment. Prepared for Evolution Mining Limited

S.S. Papadopulos & Associates, Inc. (2022). User's Guide for mod-PATH3DU. Mod-PATH3DU version 2.0.0, October 2022.

Appendix A Validation Dataset (Groundwater Level)

Mt Rawdon Operations

Post Closure Groundwater Modelling

Evolution Mining

SLR Project No.: 623.030415.00002

31 January 2025

Bore	Start Date	End Date	Obs Count
MRMB12	01-06-2001	16-07-2024	48
MRMB13	01-06-2001	16-07-2024	48
MRMB21	16-12-2003	16-07-2024	43
MRMB23	16-12-2003	15-01-2019	19
MRMB25	16-12-2003	16-07-2024	43
MRMB26	16-12-2003	16-07-2016	26
MRMB27	16-12-2003	15-01-2017	27
MRMB29	16-07-2006	16-07-2024	38
MRMB30	16-07-2006	16-07-2024	38
MRMB36	16-07-2008	16-07-2024	34
MRMB37	16-07-2008	16-07-2024	34
MRMB38	16-07-2008	16-07-2024	33
MRMB39	16-07-2008	16-07-2024	34
MRMB40	16-07-2008	16-07-2024	34
MRMB41	16-07-2008	16-07-2024	34
MRMB42	16-07-2008	16-07-2024	34
MRMB43	16-07-2008	16-07-2024	34
MRMB44	16-07-2008	16-07-2024	34
MRMB45	15-01-2012	16-07-2024	23
MRMB46	15-01-2012	16-07-2024	26
MRMB48	15-01-2012	16-07-2024	27
MRMB49	16-07-2011	16-07-2024	27
MRMB52	15-01-2012	16-07-2024	27
MRMB53	15-01-2012	16-07-2024	27
MRMB54	15-01-2012	16-07-2024	26
MRMB55	15-01-2012	16-07-2024	26
MRMB59	16-07-2013	16-07-2024	19
MRMB60	16-07-2013	16-07-2024	22
MRMB61	16-07-2013	16-07-2024	24
MRMB62	16-07-2013	16-07-2024	24
MRMB63	16-07-2013	16-07-2024	24
MRMB64	16-07-2013	16-07-2024	24
MRMB65	14-02-2014	16-07-2024	23
MRMB66	14-02-2014	16-07-2024	23
MRMB67	14-02-2014	16-07-2024	19
MRMB68	14-02-2014	16-07-2024	23
MRMB69	14-02-2014	16-07-2024	23
MRMB70	14-02-2014	16-07-2024	23
MRMB71	14-02-2014	16-07-2024	23
MRMB72	16-08-2014	16-07-2024	21
MRMB74	16-07-2017	16-07-2024	16
MRMB75	16-07-2017	16-07-2024	16
MRMB76	15-01-2019	16-07-2024	13
MRMB77	15-01-2019	16-07-2024	13

Bore	Start Date	End Date	Obs Count
MRMB78	15-01-2019	16-07-2024	13
MRPB1	16-12-2003	16-07-2024	42
MRPB2	16-07-2008	16-07-2024	34
MRMB1	29-12-2000	16-09-2014	25
MRMB10	11-10-2001	03-05-2015	29
MRMB11	25-09-2001	10-12-2014	28
MRMB17	25-09-2001	26-12-2013	26
MRMB18	28-09-2001	26-12-2013	26
MRMB19	05-10-2001	31-12-2013	25
MRMB2	29-12-2000	16-09-2014	27
MRMB20	28-09-2001	30-04-2015	29
MRMB24	21-01-2004	05-06-2013	20
MRMB28	16-01-2004	10-06-2017	28
MRMB3	29-12-2000	08-05-2015	30
MRMB31	22-07-2006	09-05-2015	19
MRMB32	22-07-2006	08-05-2015	19
MRMB34	22-07-2006	03-05-2015	19
MRMB35	05-09-2008	13-12-2013	12
MRMB4	29-12-2000	08-05-2015	30
MRMB5	25-09-2001	03-05-2015	29
MRMB50	26-10-2011	23-04-2015	9
MRMB6	25-09-2001	03-05-2015	29
MRMB7	25-09-2001	03-05-2015	29
MRMB8	25-09-2001	13-08-2014	27
MRMB9	11-02-2002	23-09-2014	26
TSF_Piezo1	21-07-2013	05-01-2020	13
TSF_Piezo2	21-07-2013	05-01-2020	13
TSF_Piezo3	21-07-2013	05-01-2020	13
TSF_Piezo4	21-07-2013	05-01-2020	11
VWP1a	11-10-2021	25-01-2023	4
VWP2a	11-10-2021	25-01-2023	4
VWP3a	06-07-2022	25-01-2023	2
VWP4b	11-10-2021	25-01-2023	4
VWP5a	11-10-2021	25-01-2023	4

Appendix B Validation Hydrographs

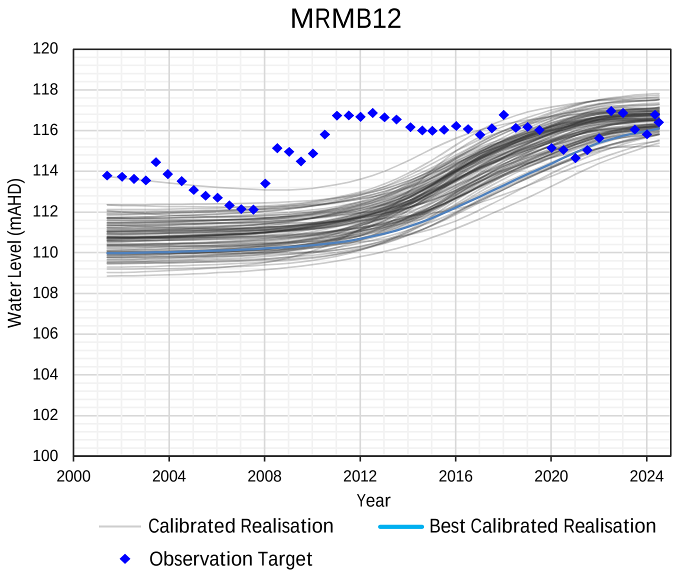
Mt Rawdon Operations

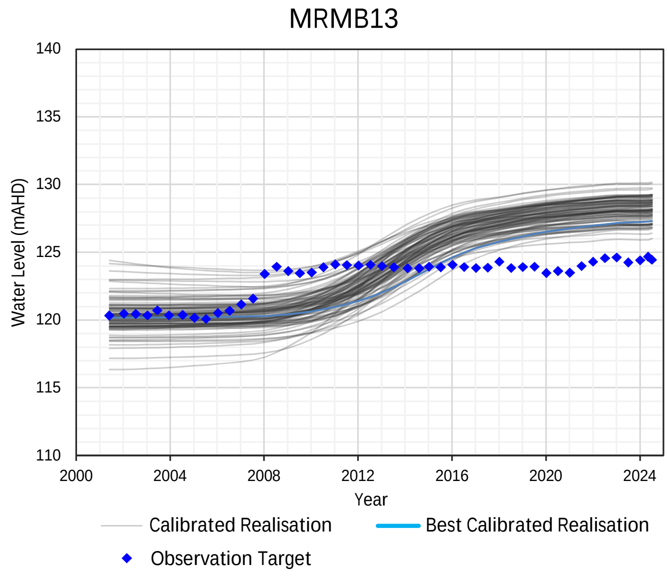
Post Closure Groundwater Modelling

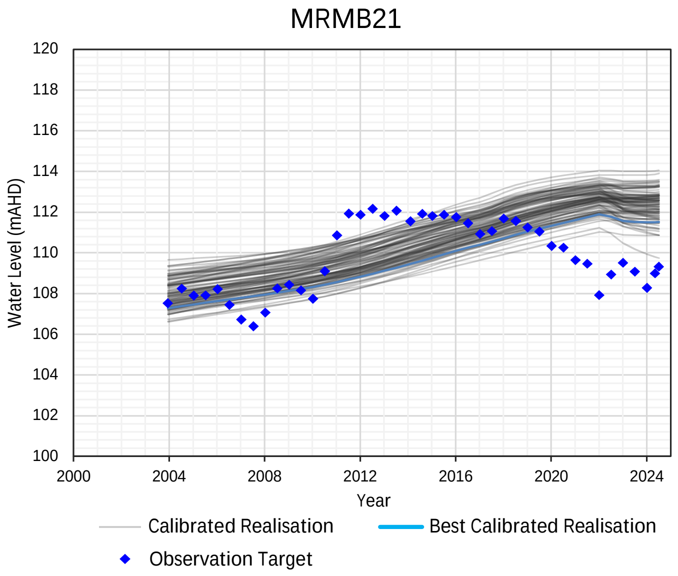
Evolution Mining

SLR Project No.: 623.030415.00002

31 January 2025


MRMB12
Water Level (mAHD)
120
118
116
114
112
110
108
106
104
102
100
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target


MRMB13
Water Level (mAHD)
140
135
130
125
120
115
110
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target


MRMB21
Water Level (mAHD)
120
118
116
114
112
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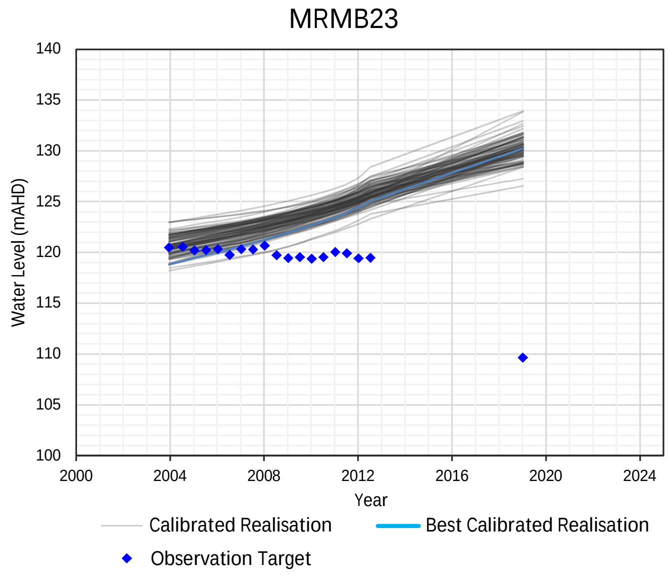
102
100
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target


MRMB23
Water Level (mAHD)
140
135
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125
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105
100
2000
2004
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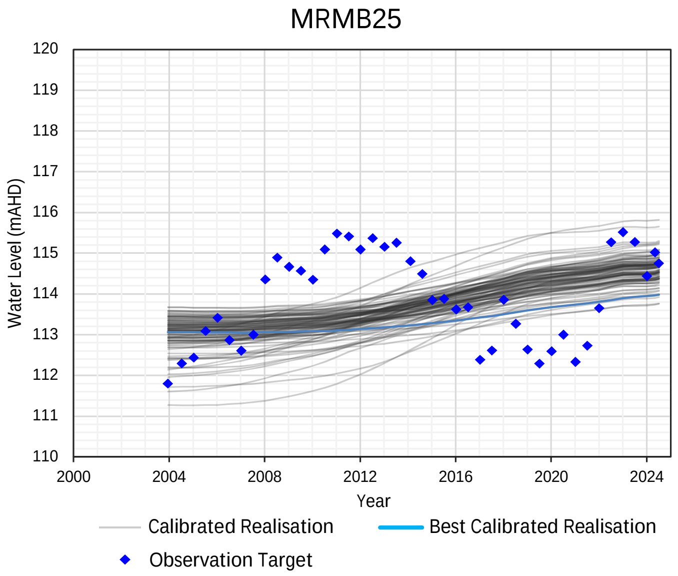
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target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Water Level (mAHD)
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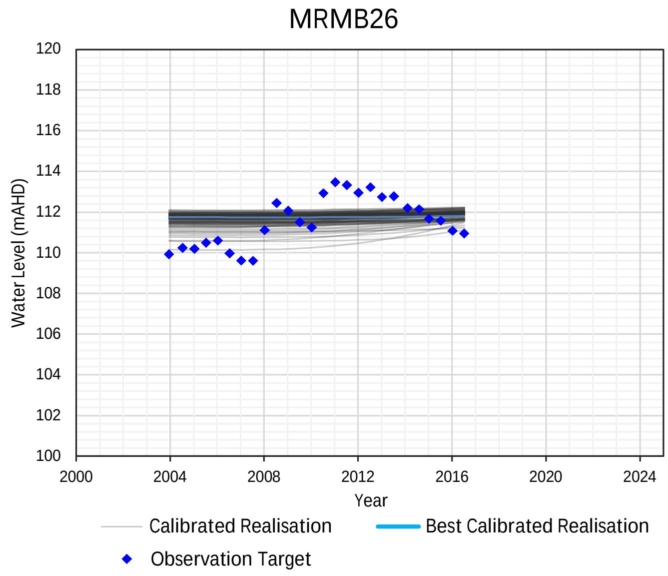
119
118
117
116
115
114
113
112
111
110
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target


MRMB26
Water Level (mAHD)
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2016
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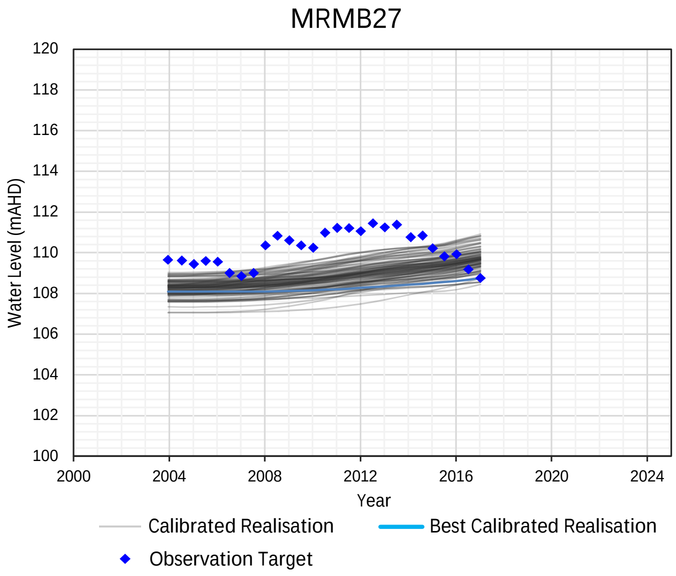
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target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108
106
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Water Level (mAHD)
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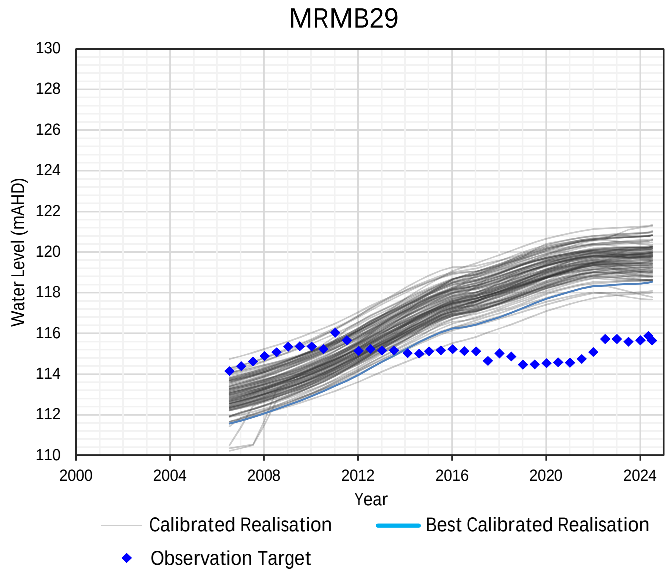
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target


MRMB29
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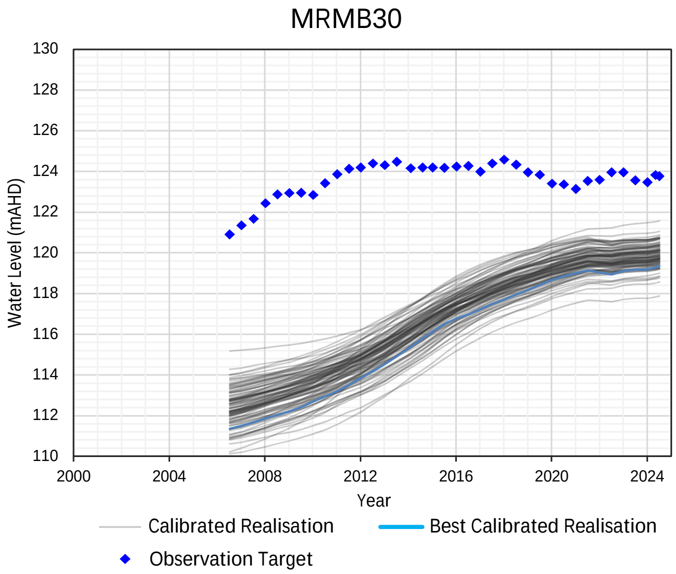
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target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124
122
120
118
116
114
112
110
Water Level (mAHD)
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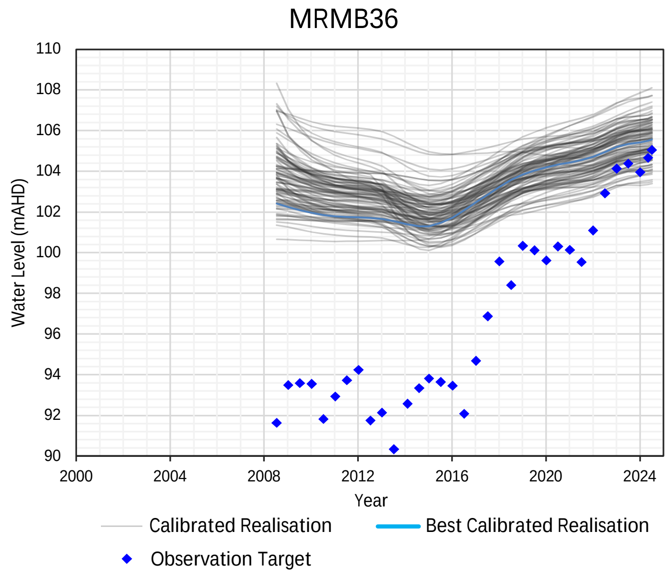
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target


MRMB36
110
108
106
104
102
100
98
96
94
92
90
Water Level (mAHD)
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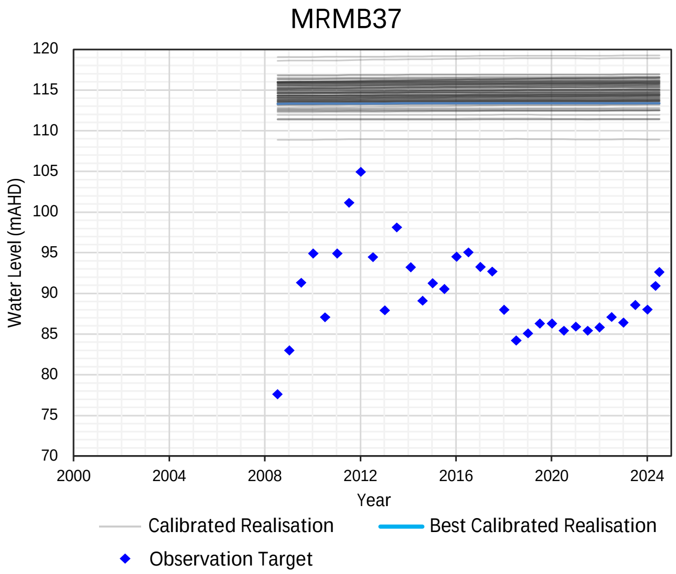
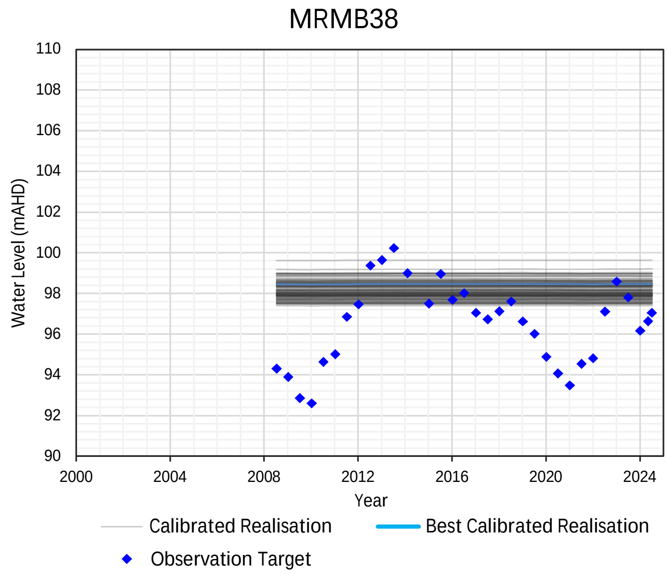
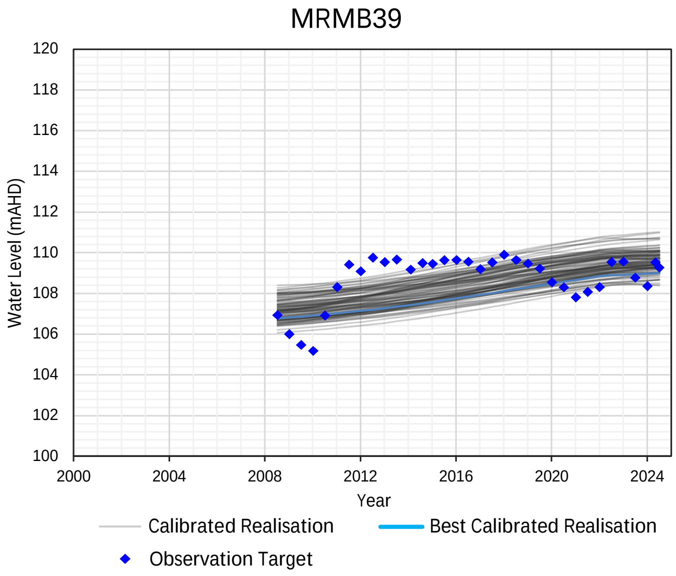
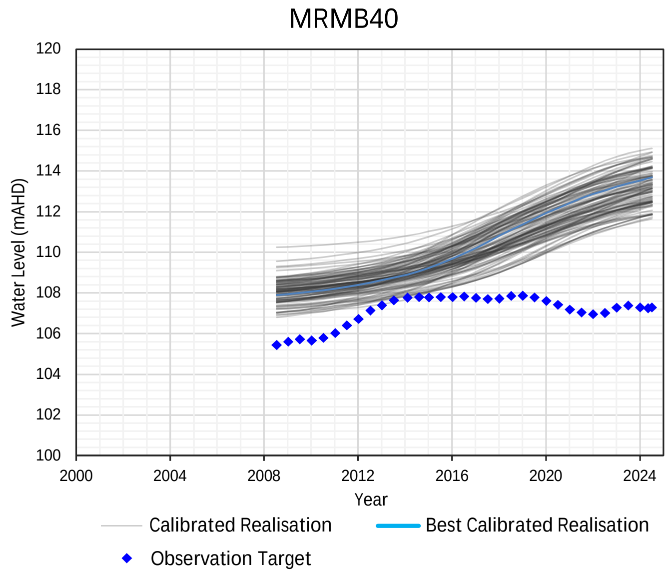
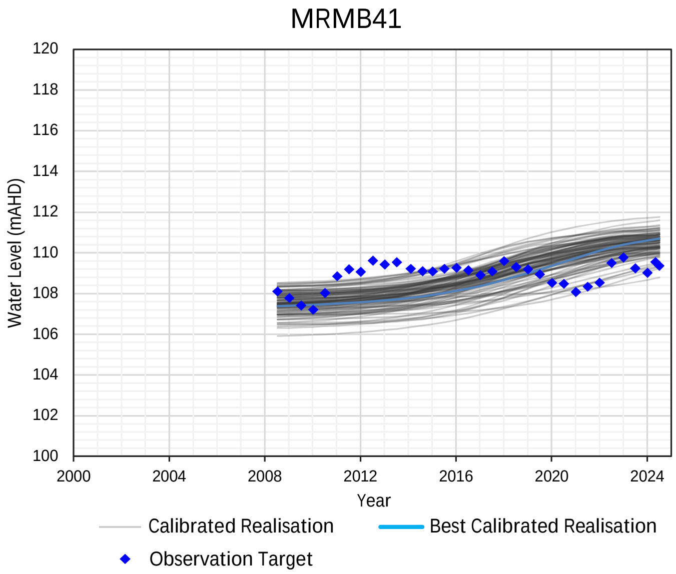
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

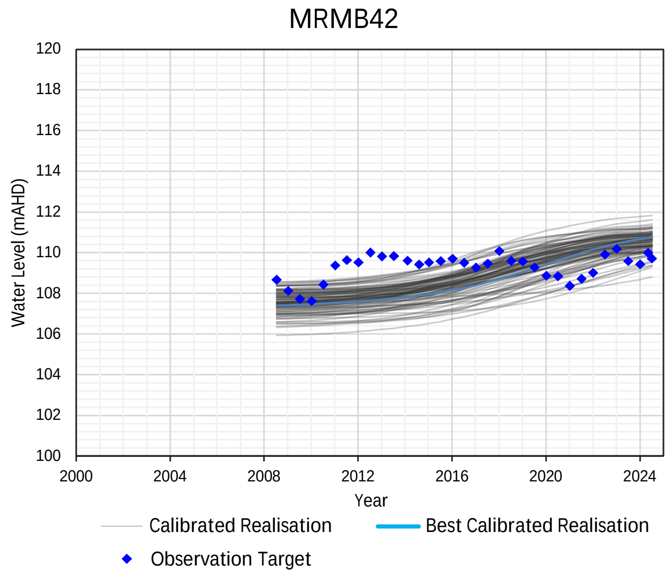

MRMB37
120
115
110
105
100
95
90
85
80
75
70
Water Level (mAHD)
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

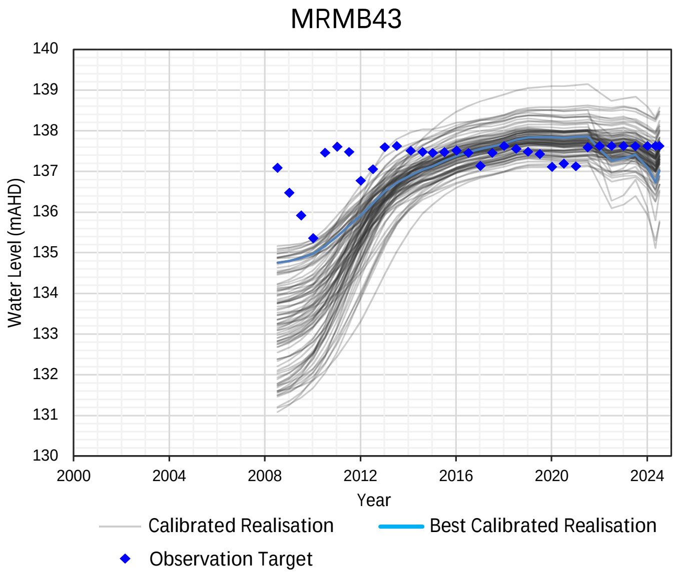

MRMB38
110
108
106
104
102
100
98
96
94
92
90
Water Level (mAHD)
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

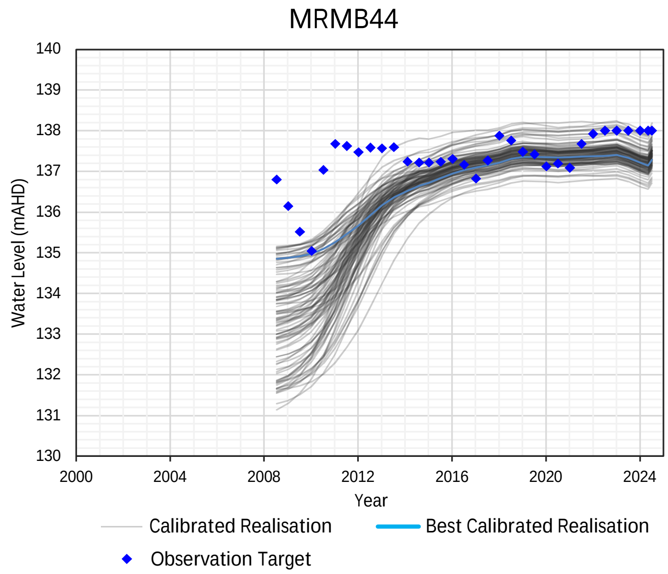

MRMB39
Water Level (mAHD)
120
118
116
114
112
110
108
106
104
102
100
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

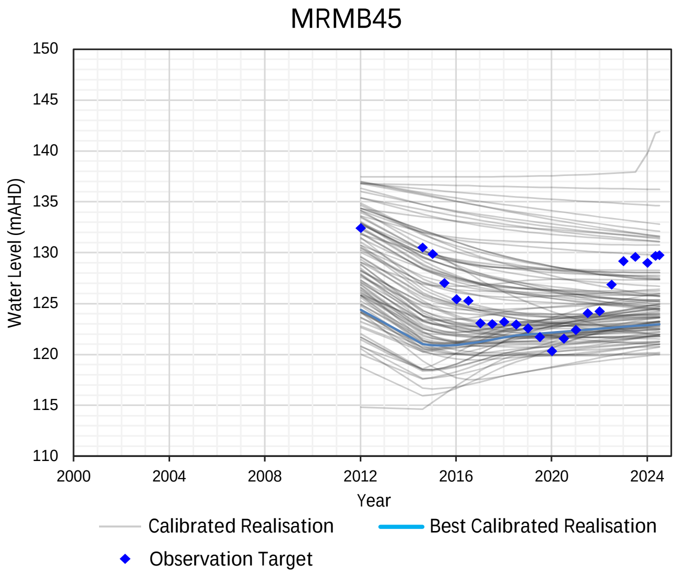

MRMB40
Water Level (mAHD)
120
118
116
114
112
110
108
106
104
102
100
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

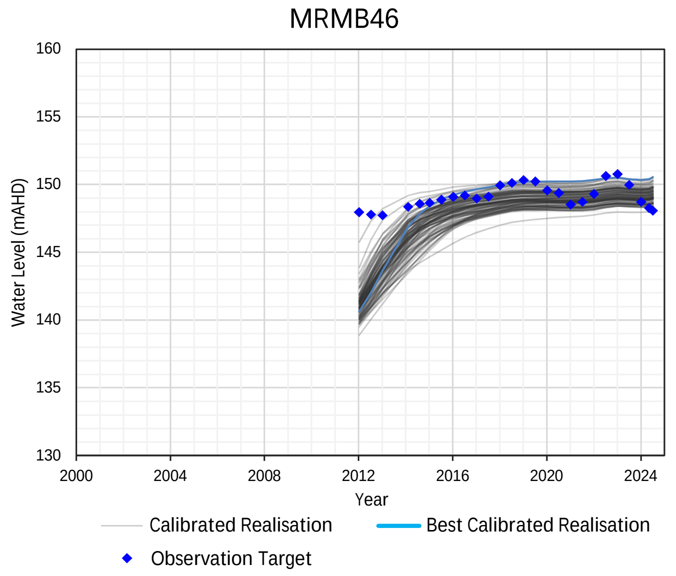

MRMB41
Water Level (mAHD)
120
118
116
114
112
110
108
106
104
102
100
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

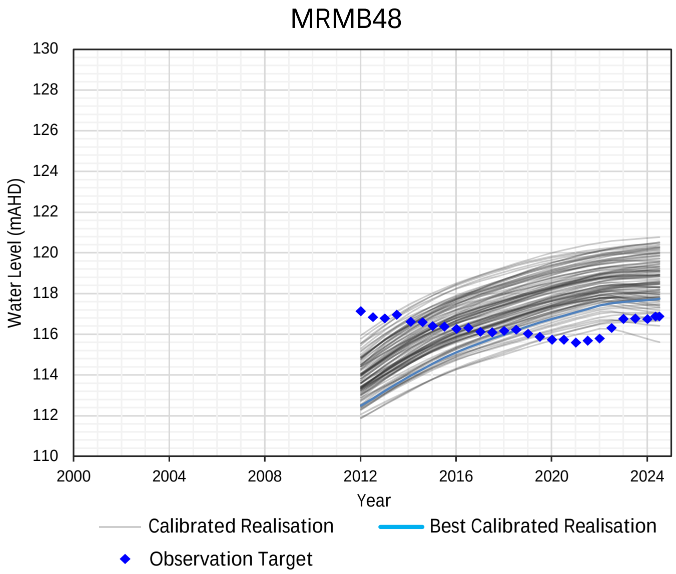

MRMB42
Water Level (mAHD)
120
118
116
114
112
110
108
106
104
102
100
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

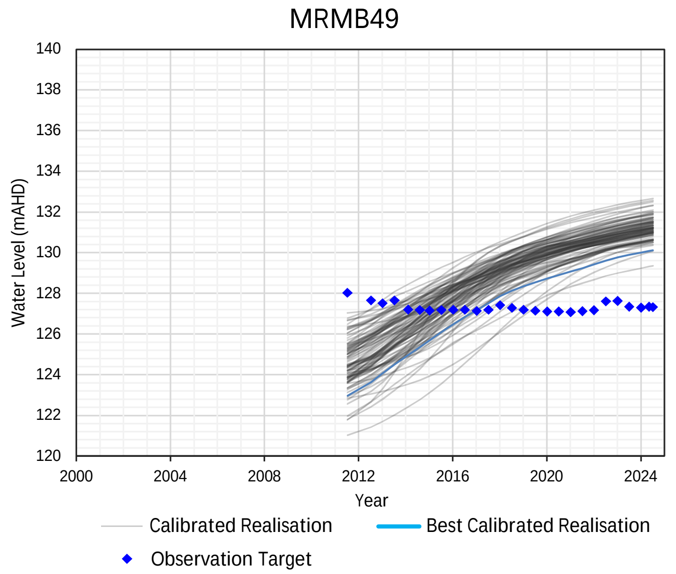

MRMB43
Water Level (mAHD)
140
139
138
137
136
135
134
133
132
131
130
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

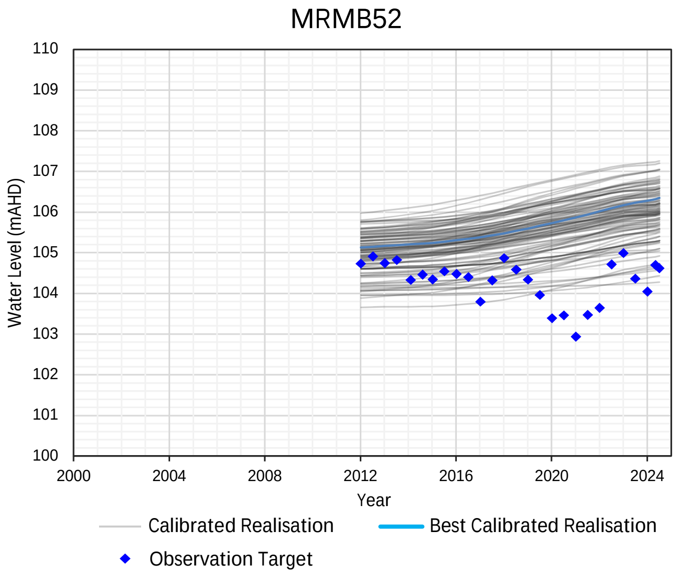

MRMB44
Water Level (mAHD)
140
139
138
137
136
135
134
133
132
131
130
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

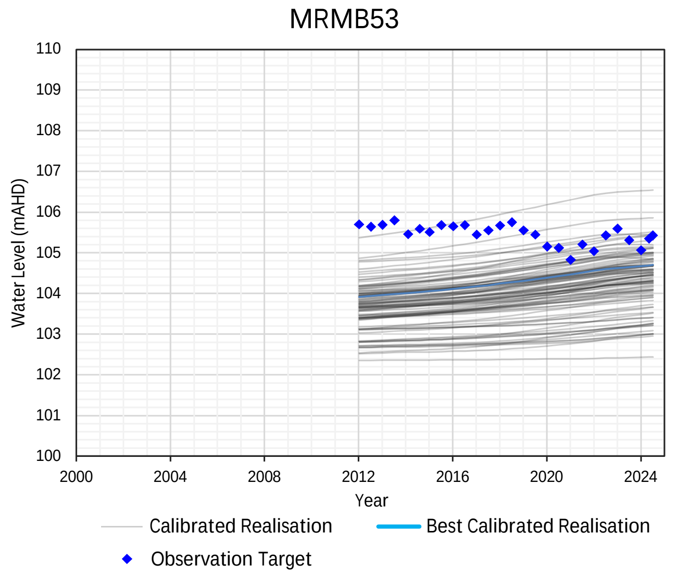

MRMB45
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

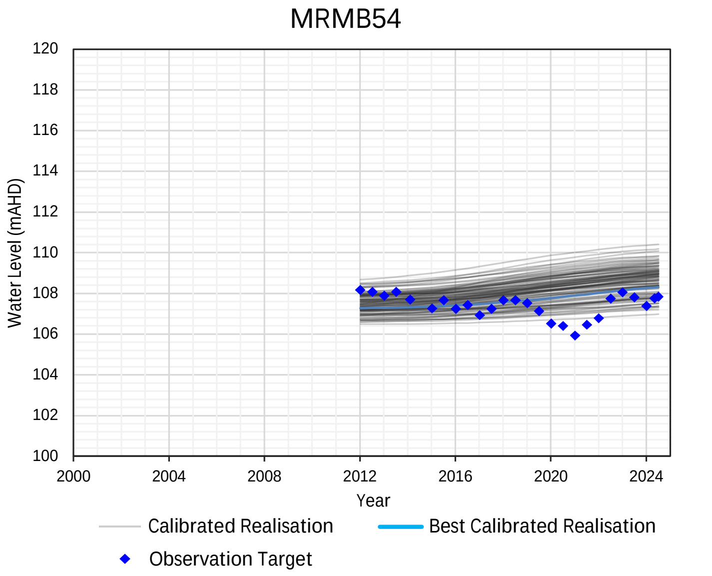

MRMB46
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

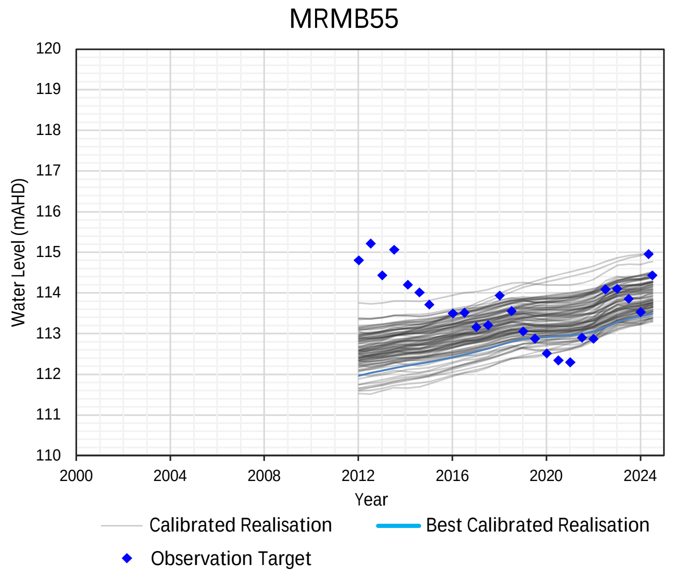

MRMB48
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

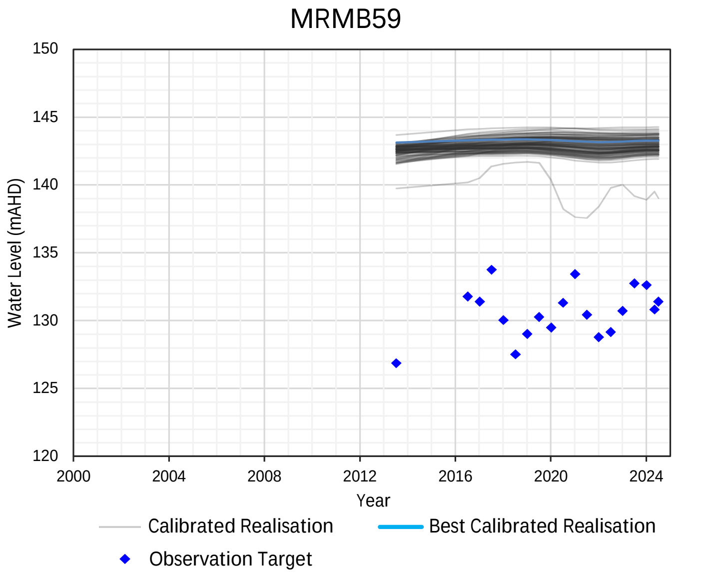

MRMB49
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

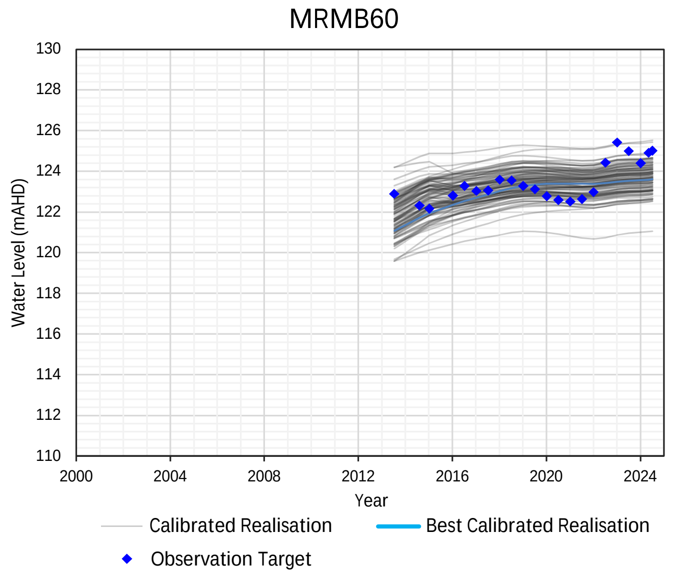

MRMB52
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

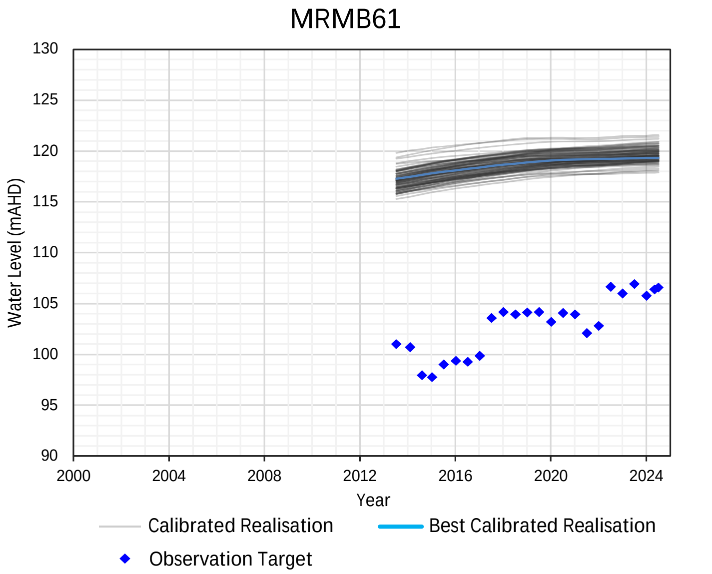

MRMB53
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

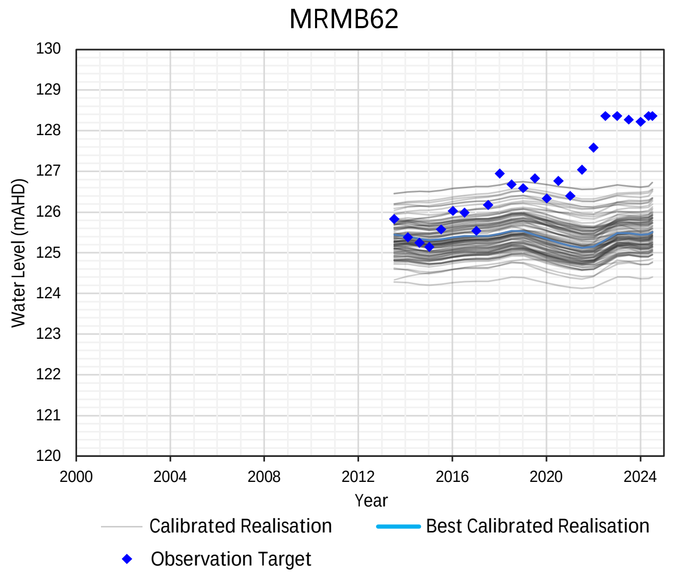

MRMB54
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

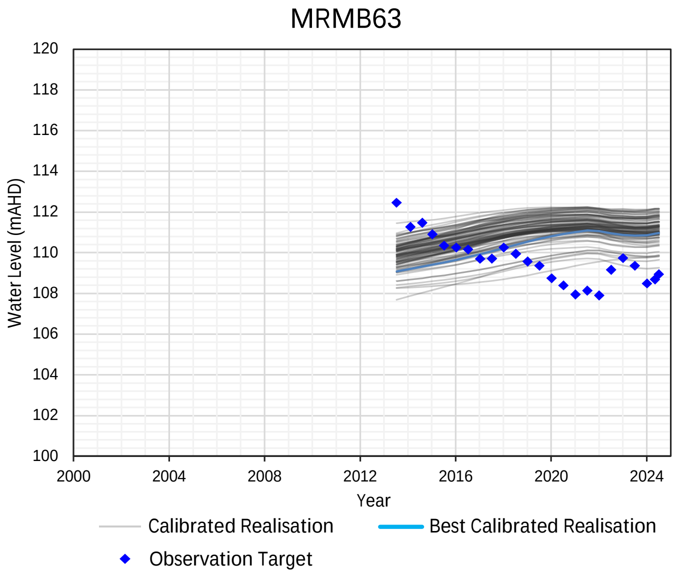

MRMB55
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

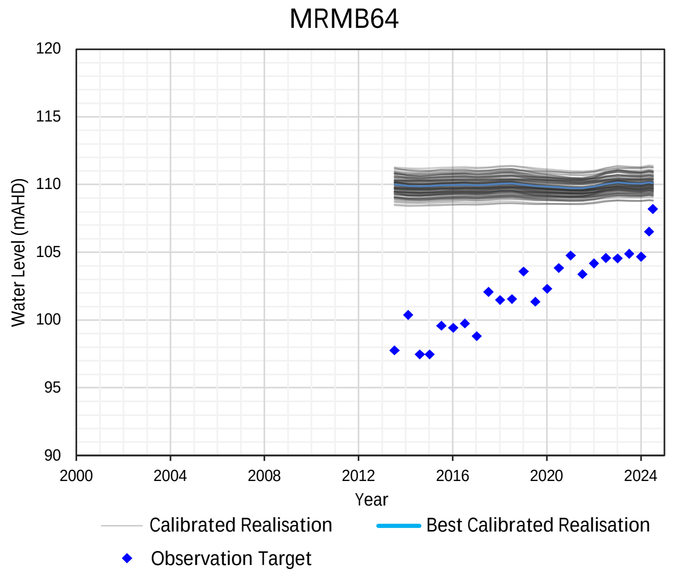

MRMB59
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

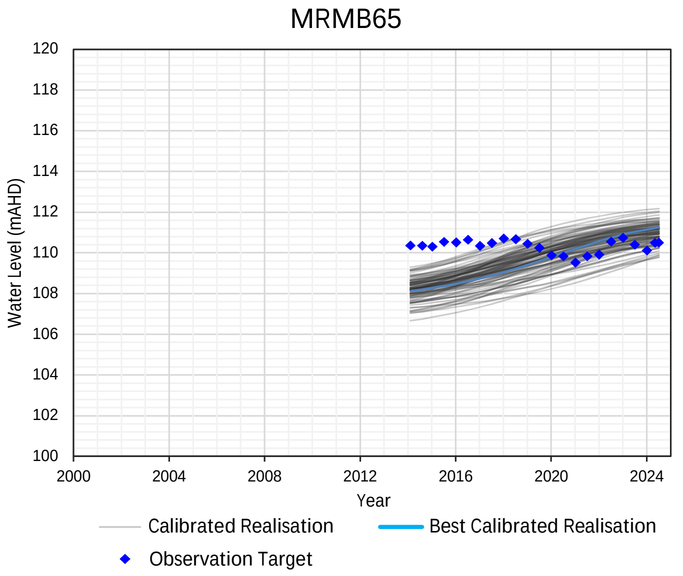

MRMB60
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

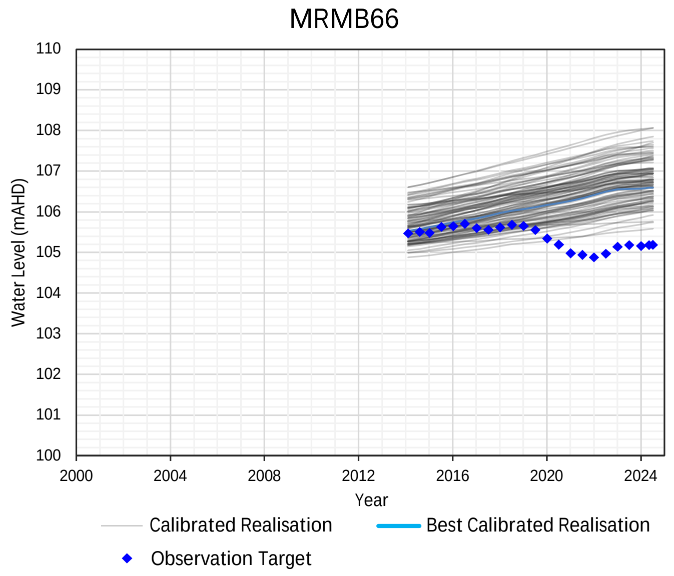

MRMB61
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

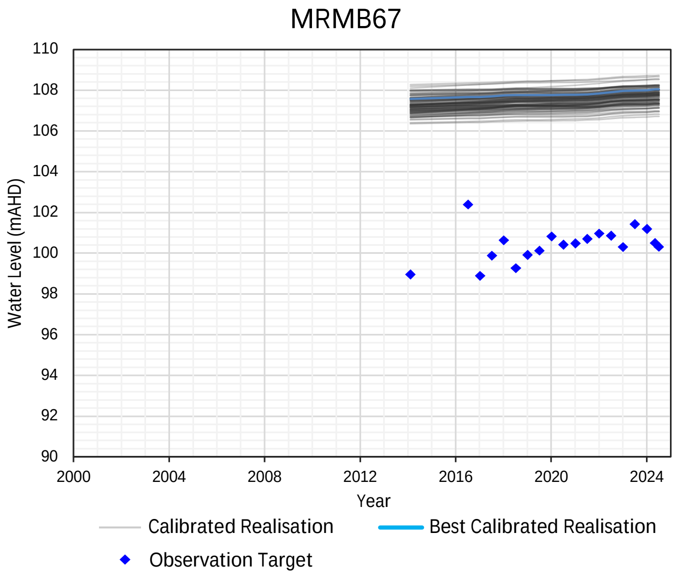

MRMB62
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

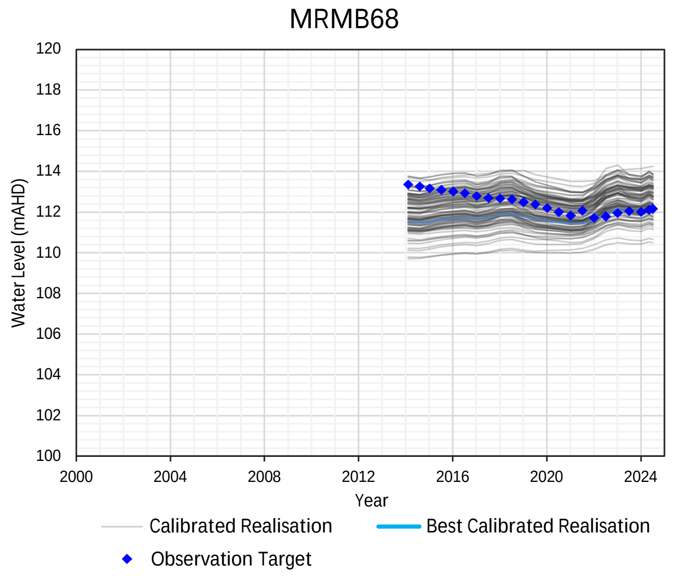

MRMB63
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

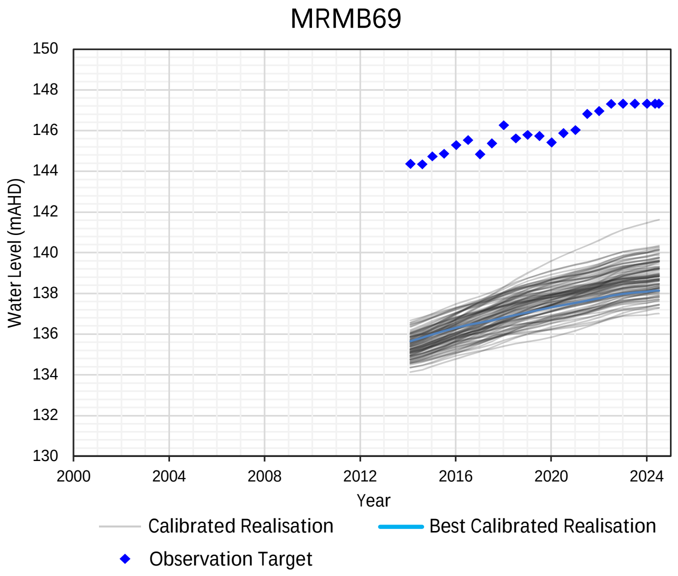

MRMB64
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

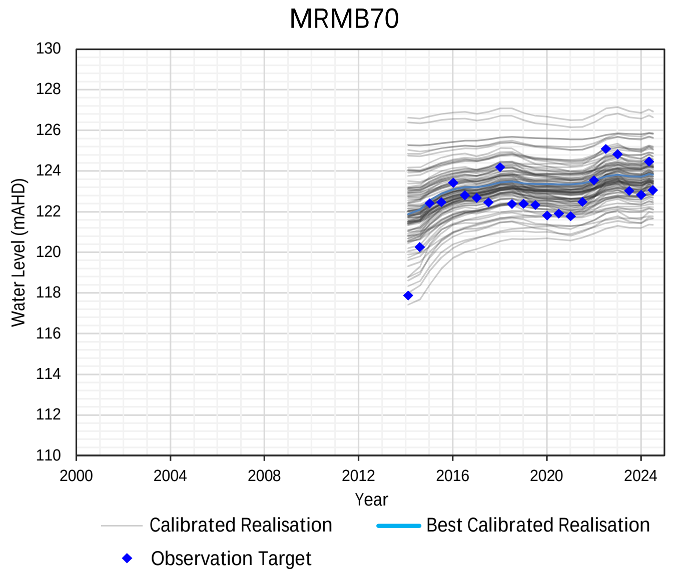

MRMB65
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

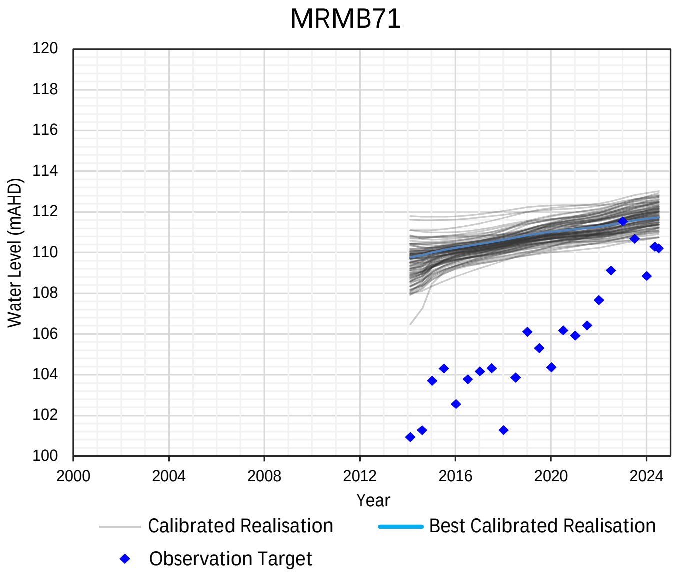

MRMB66
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

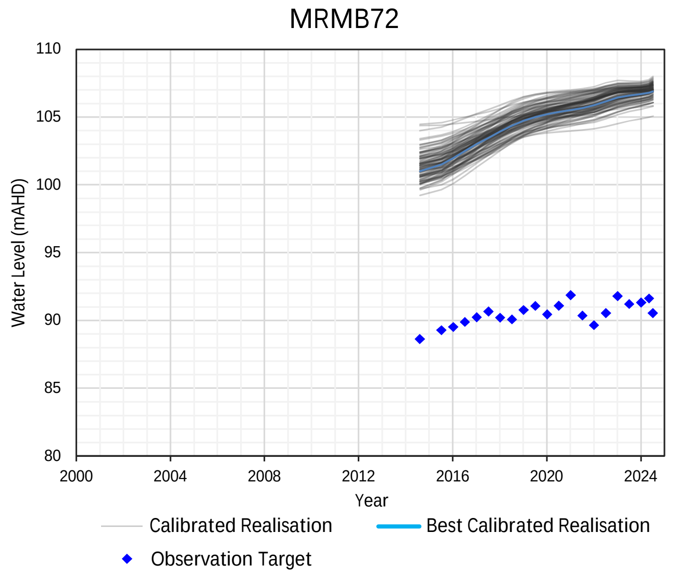

MRMB67
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

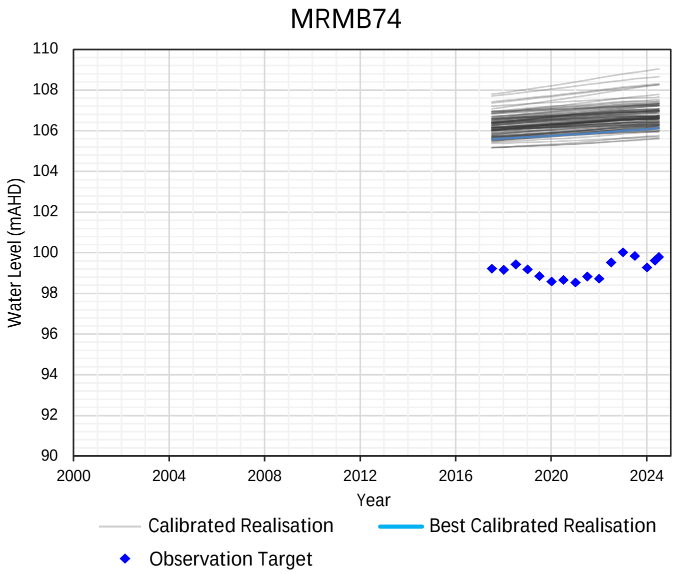

MRMB68
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

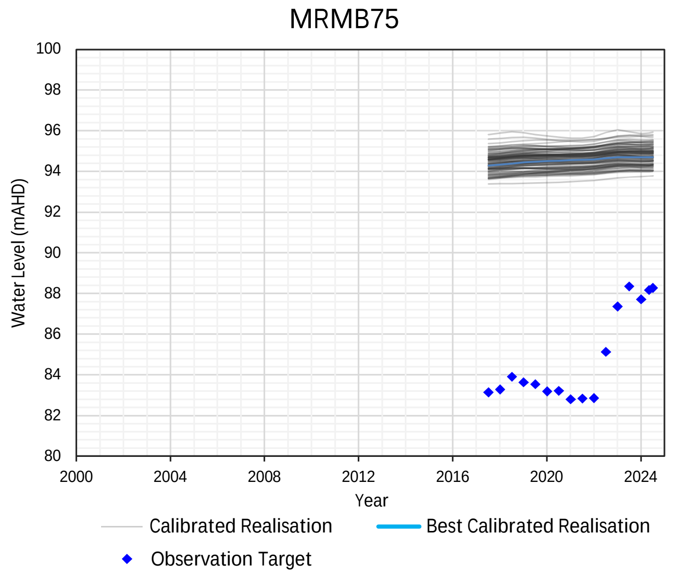

MRMB69
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

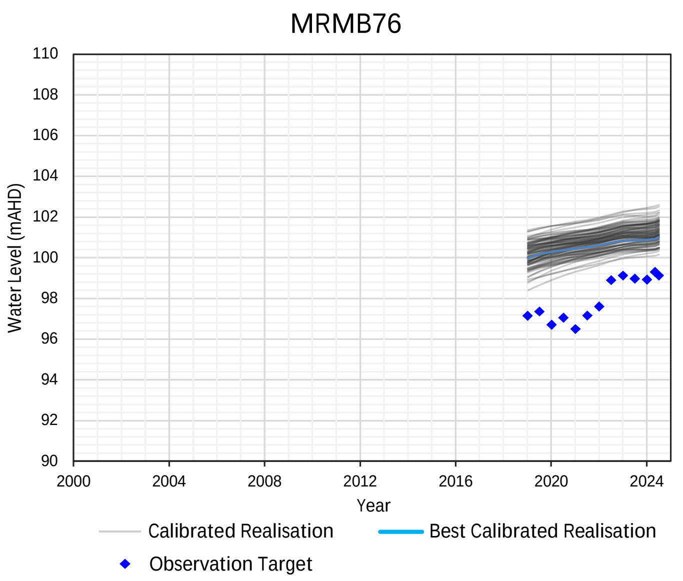

MRMB70
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

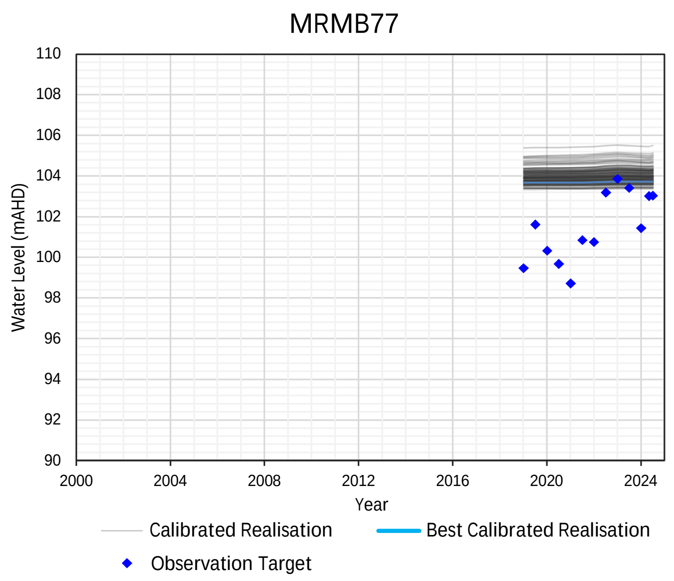

MRMB71
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

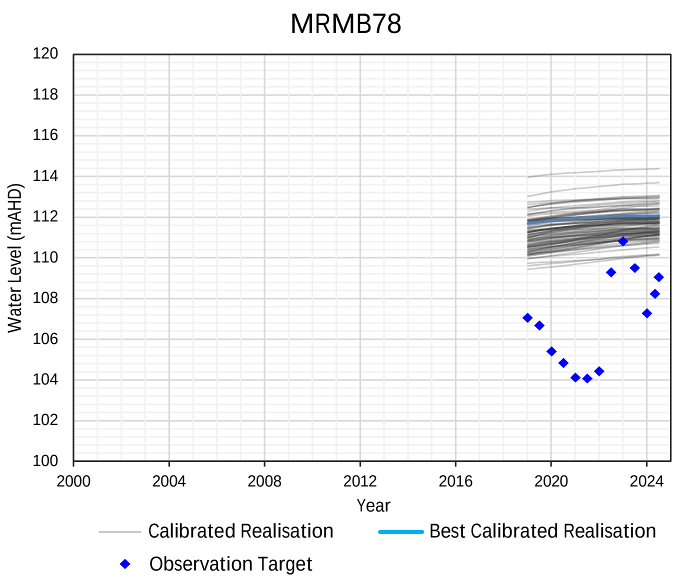

MRMB72
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

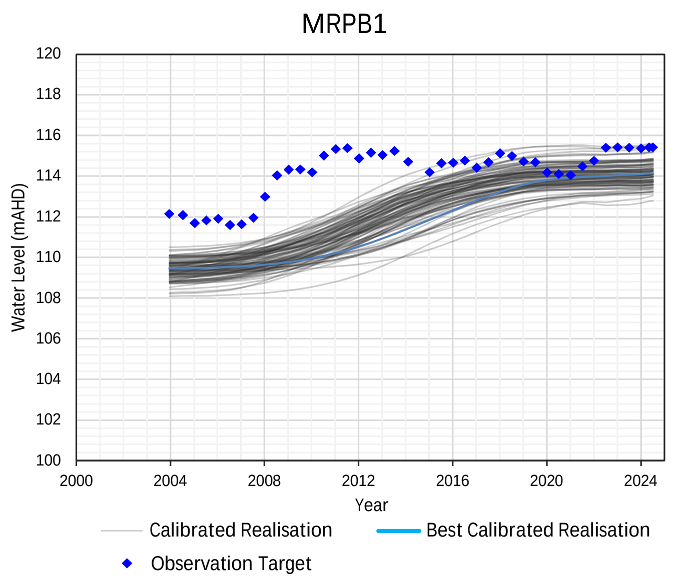

MRMB74
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

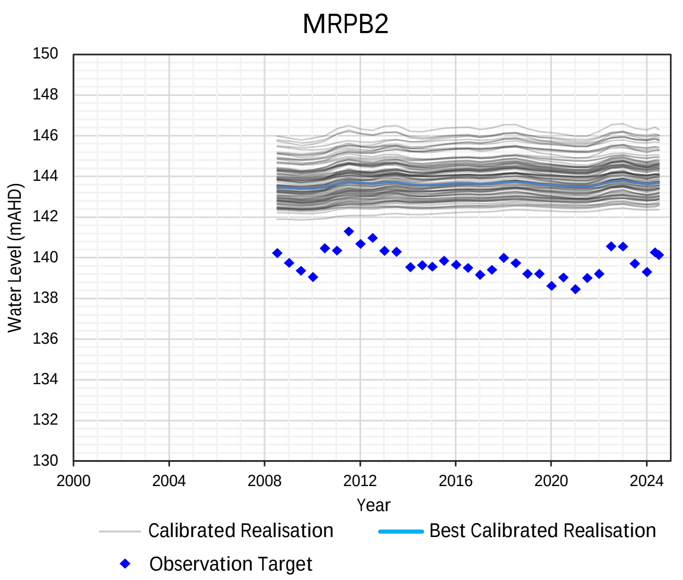

MRMB75
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

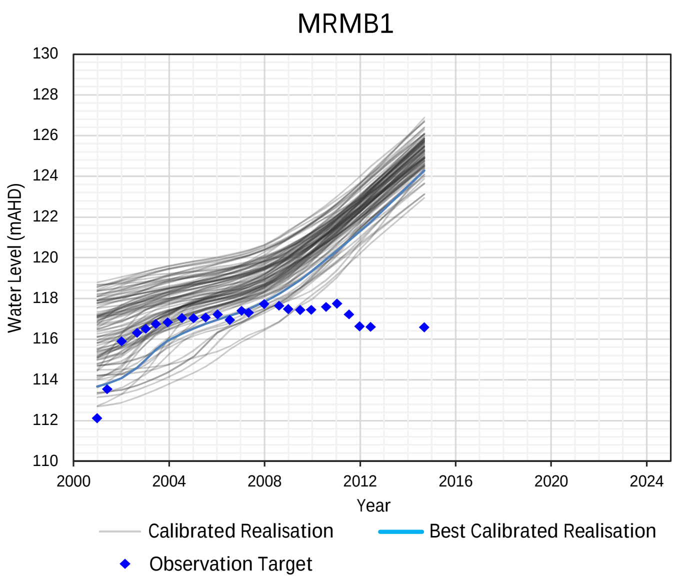

MRMB76
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

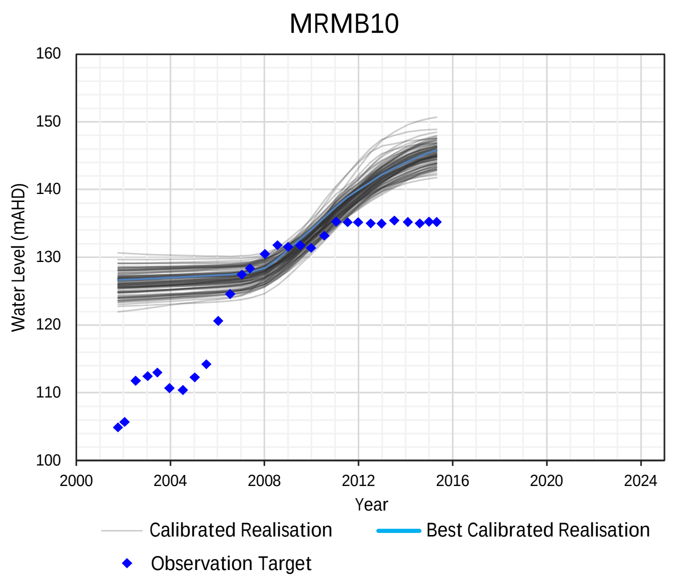

MRMB77
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

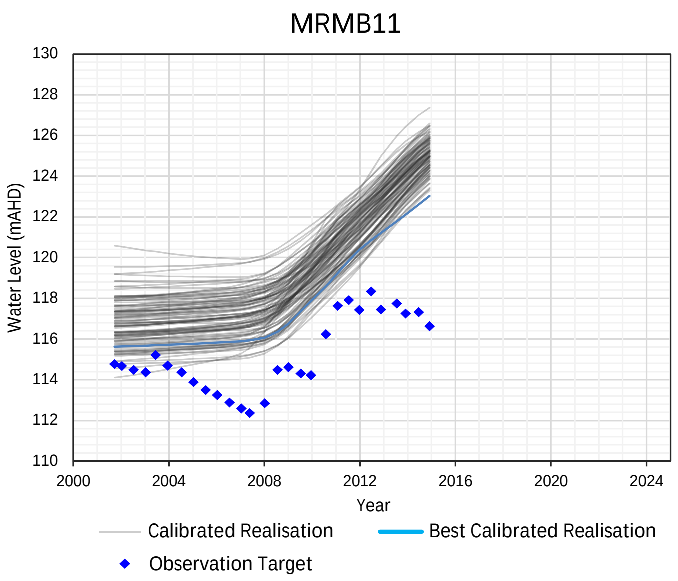

MRMB78
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

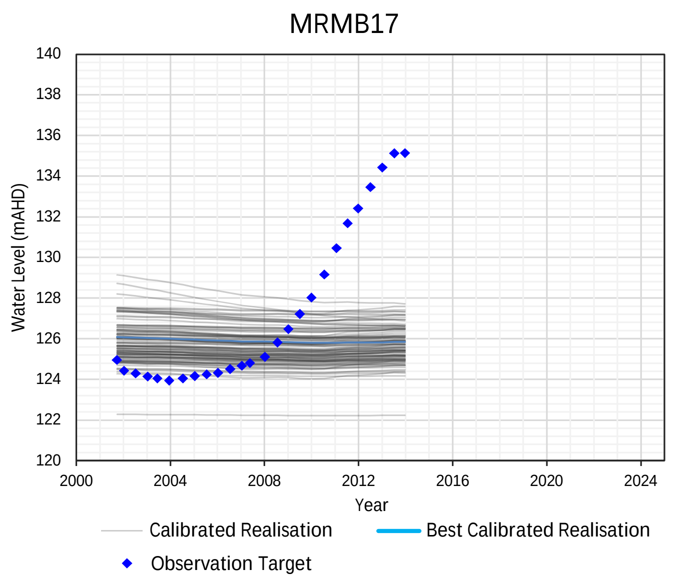

MRPB1
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

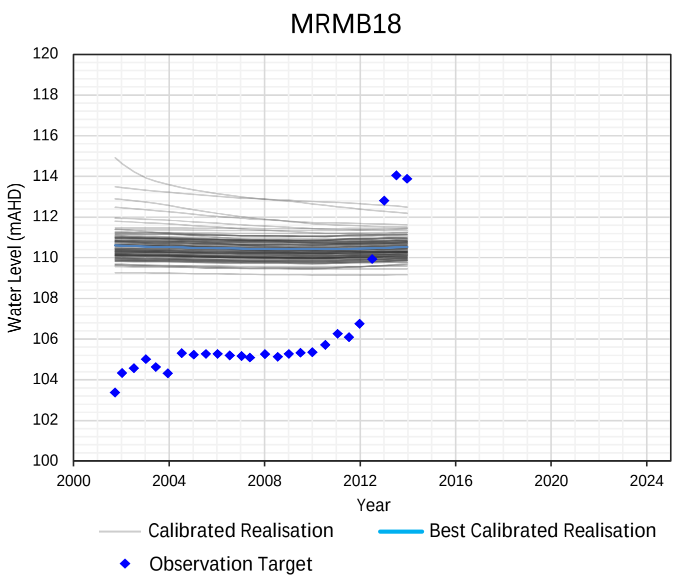

MRPB2
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

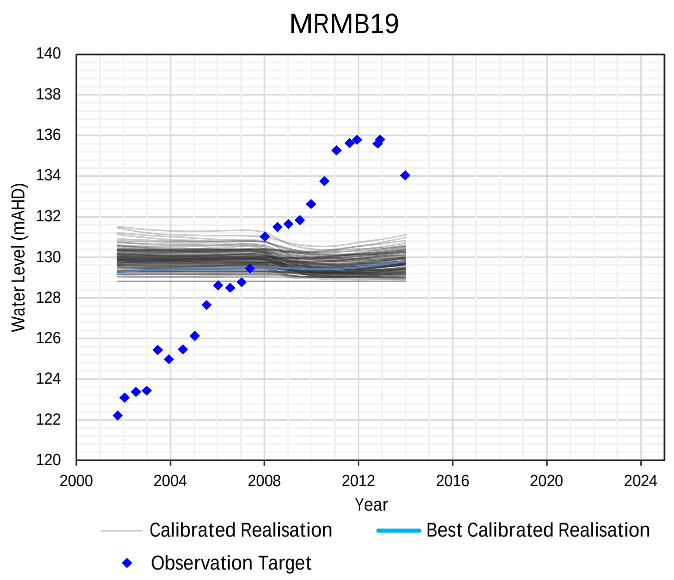

MRMB1
Water Level (mAHD)
130
128
126
124
122
120
118
116
114
112
110
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

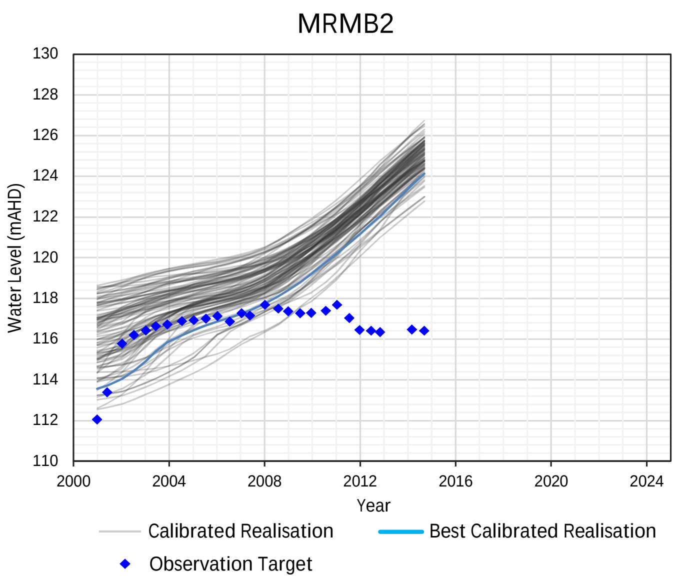

MRMB10
Water Level (mAHD)
160
150
140
130
120
110
100
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

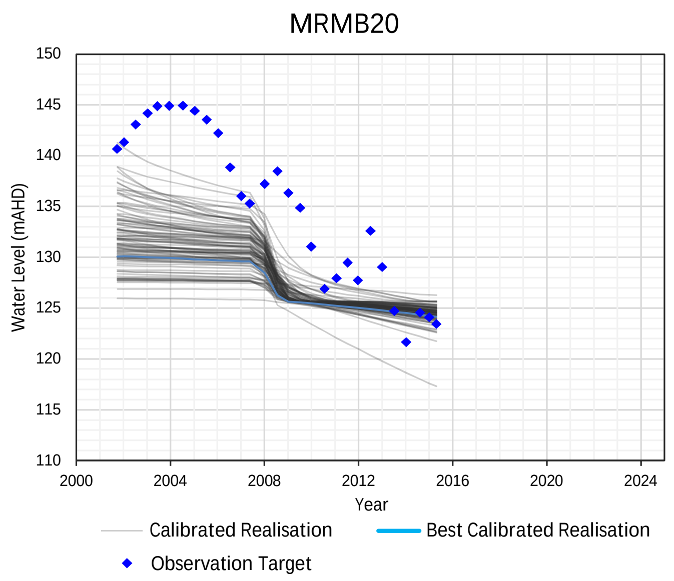

MRMB11
Water Level (mAHD)
130
128
126
124
122
120
118
116
114
112
110
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

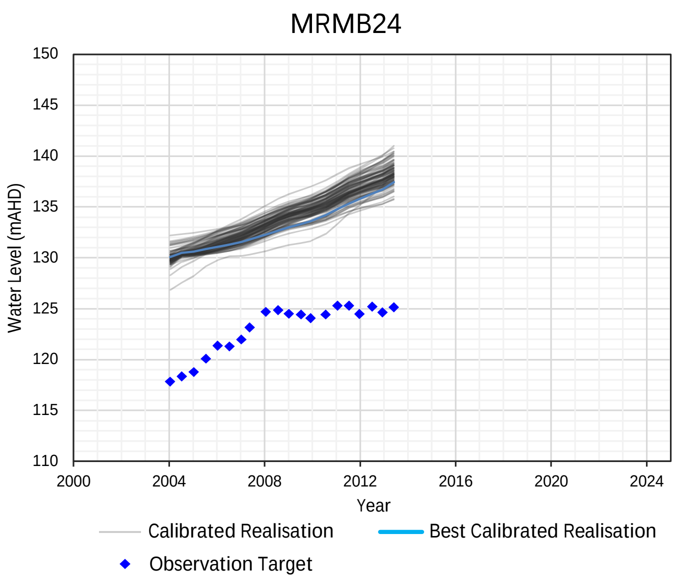

MRMB17
Water Level (mAHD)
140
138
136
134
132
130
128
126
124
122
120
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

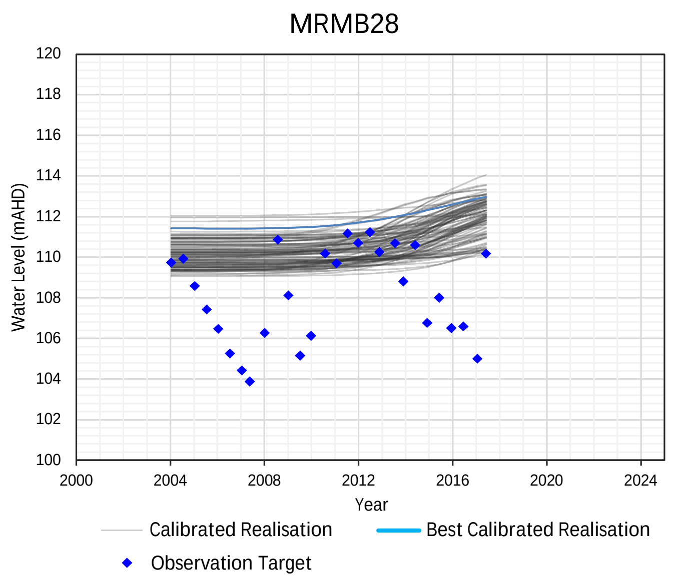

MRMB18
Water Level (mAHD)
120
118
116
114
112
110
108
106
104
102
100
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

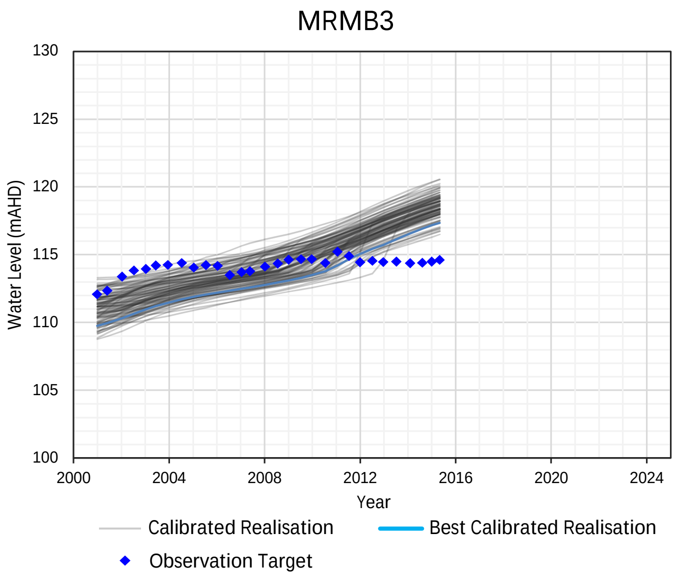

MRMB19
Water Level (mAHD)
140
138
136
134
132
130
128
126
124
122
120
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

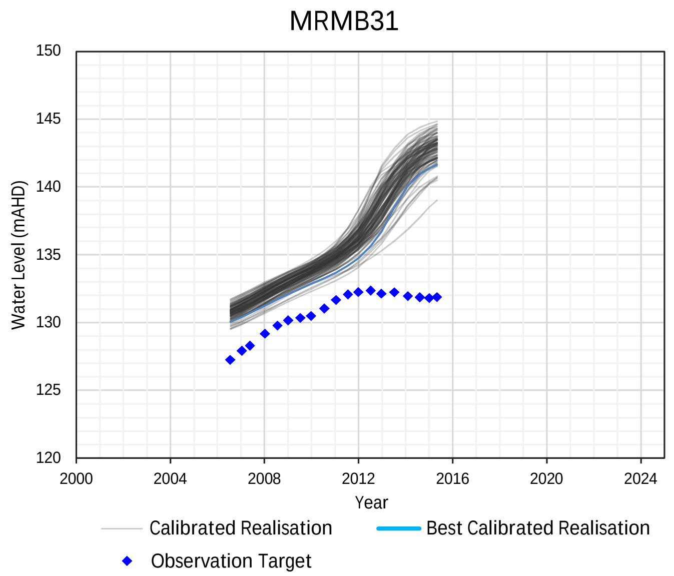

MRMB2
Water Level (mAHD)
130 128 126 124 122 120 118 116 114 112 110
2000 2004 2008 2012 2016 2020 2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

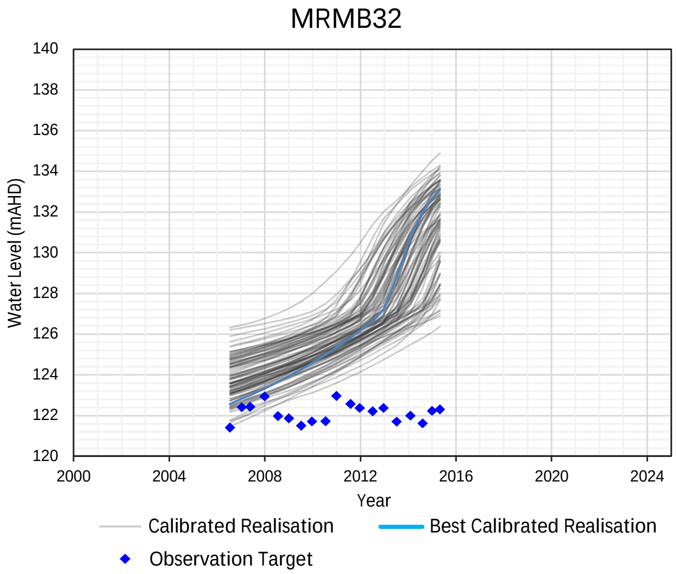

MRMB20
Water Level (mAHD)
150 145 140 135 130 125 120 115 110
2000 2004 2008 2012 2016 2020 2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

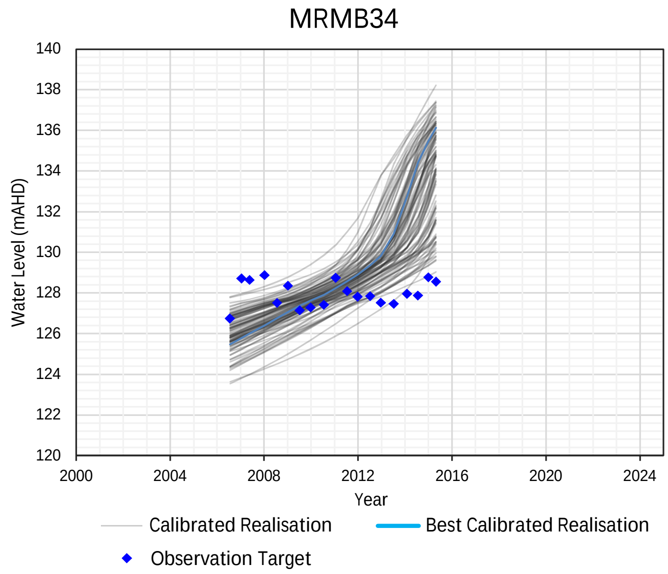

MRMB24
Water Level (mAHD)
150 145 140 135 130 125 120 115 110
2000 2004 2008 2012 2016 2020 2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

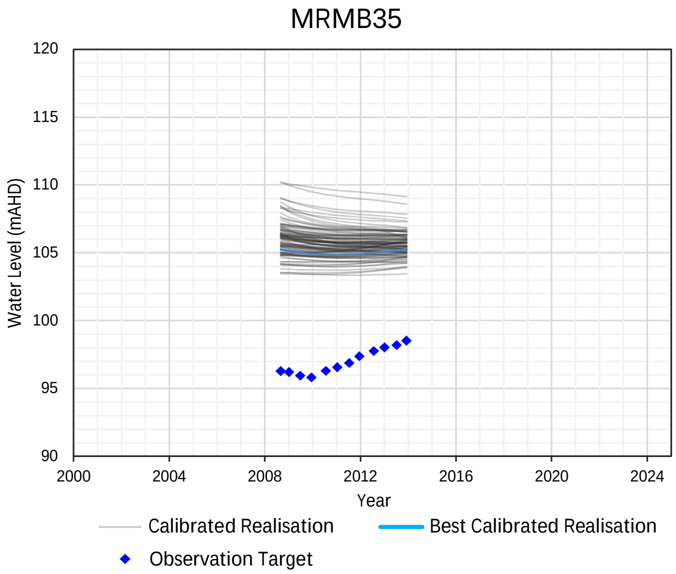

MRMB28
Water Level (mAHD)
120 118 116 114 112 110 108 106 104 102 100
2000 2004 2008 2012 2016 2020 2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

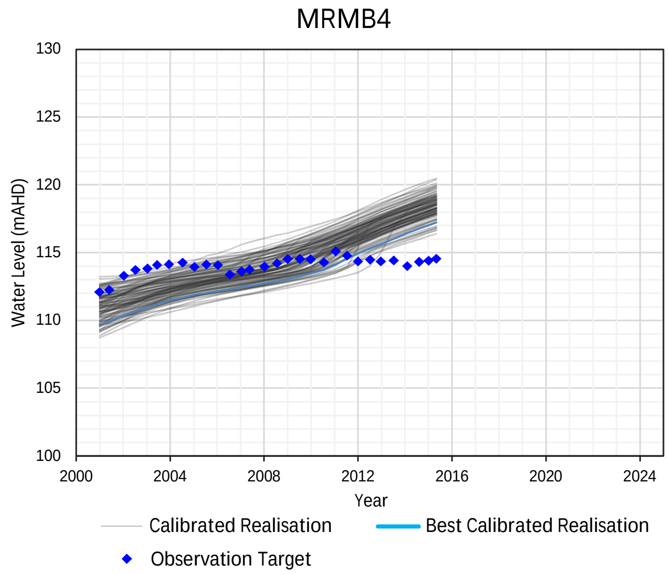

MRMB3
Water Level (mAHD)
130 125 120 115 110 105 100
2000 2004 2008 2012 2016 2020 2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

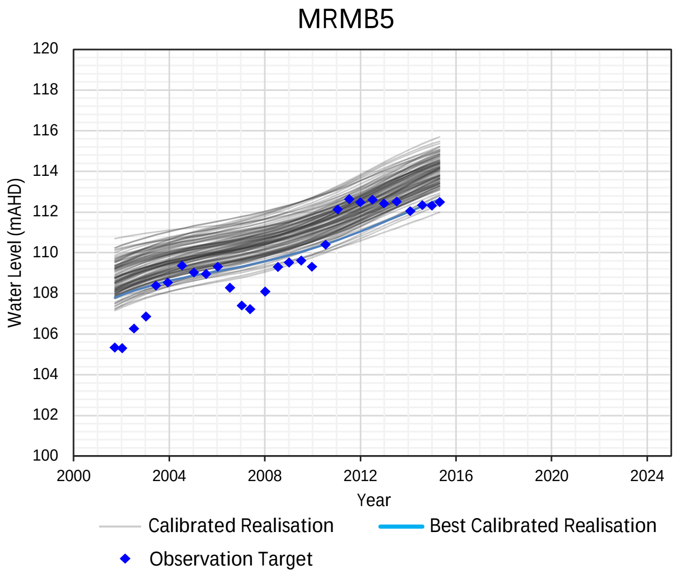

MRMB31
Water Level (mAHD)
150 145 140 135 130 125 120
2000 2004 2008 2012 2016 2020 2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

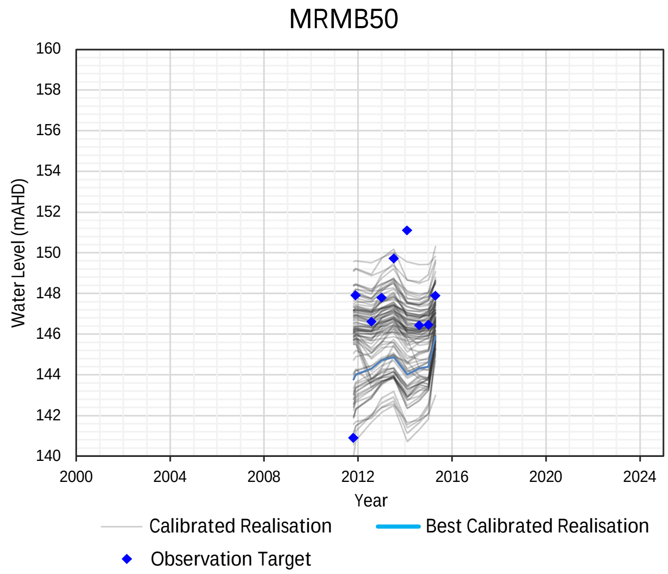

MRMB32
Water Level (mAHD)
140
138
136
134
132
130
128
126
124
122
120
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

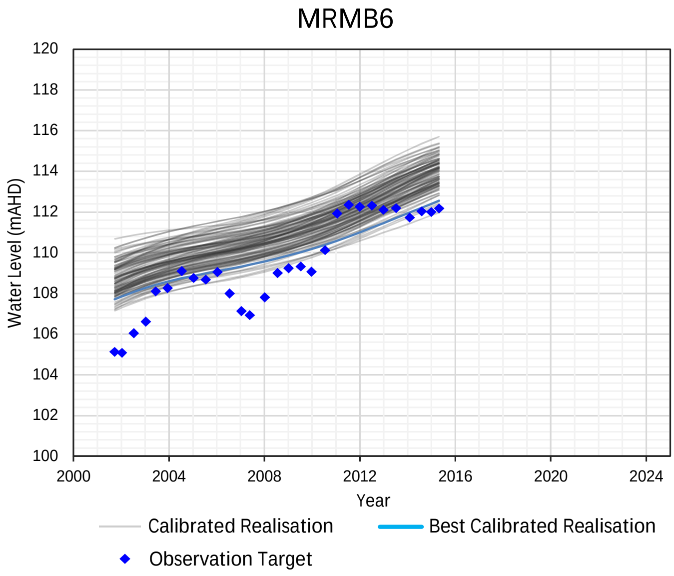

MRMB34
Water Level (mAHD)
140
138
136
134
132
130
128
126
124
122
120
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

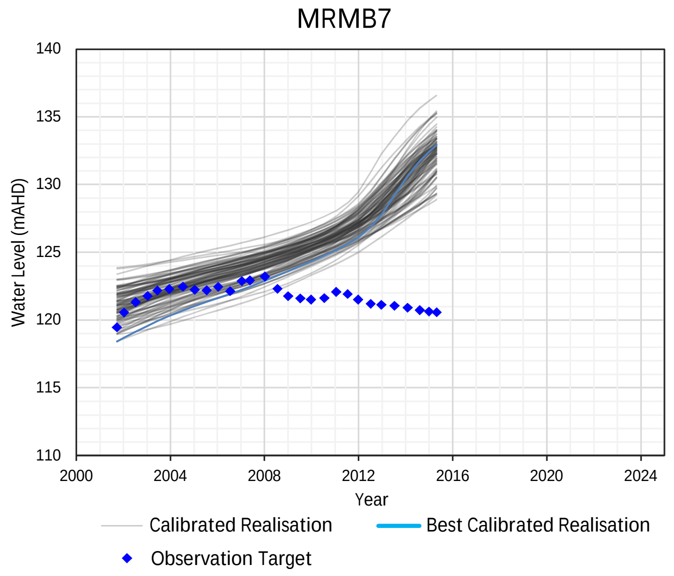

MRMB35
Water Level (mAHD)
120
115
110
105
100
95
90
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

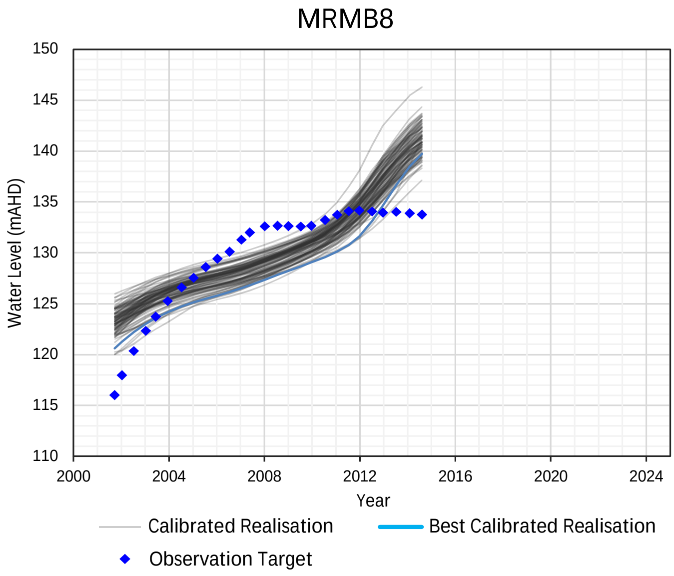

MRMB4
Water Level (mAHD)
130
125
120
115
110
105
100
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

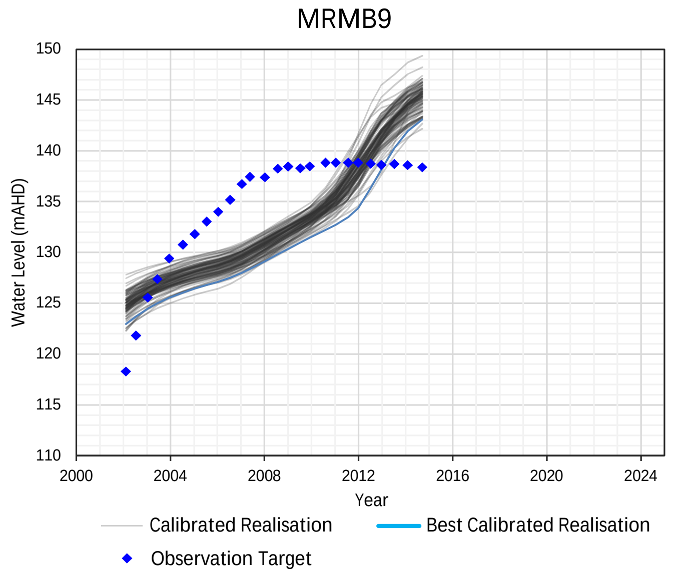

MRMB5
Water Level (mAHD)
120
118
116
114
112
110
108
106
104
102
100
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

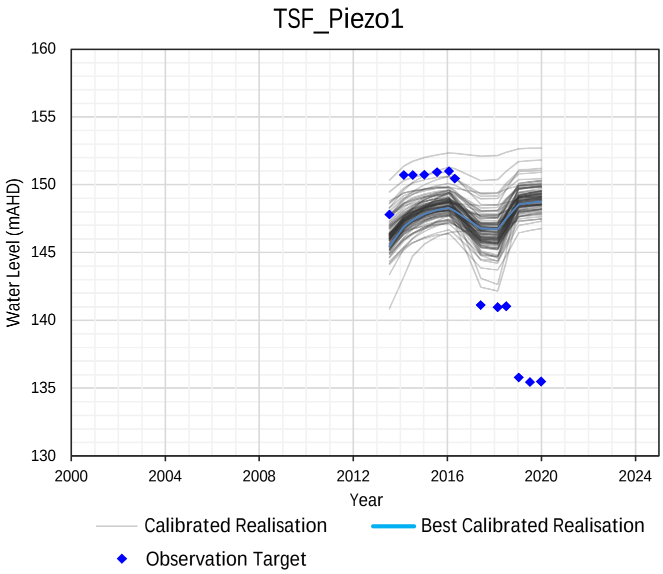

MRMB50
Water Level (mAHD)
160
158
156
154
152
150
148
146
144
142
140
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

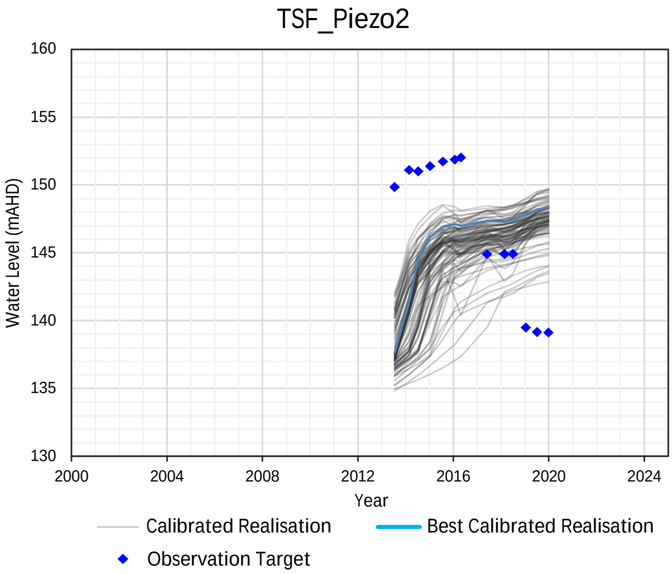

MRMB6
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

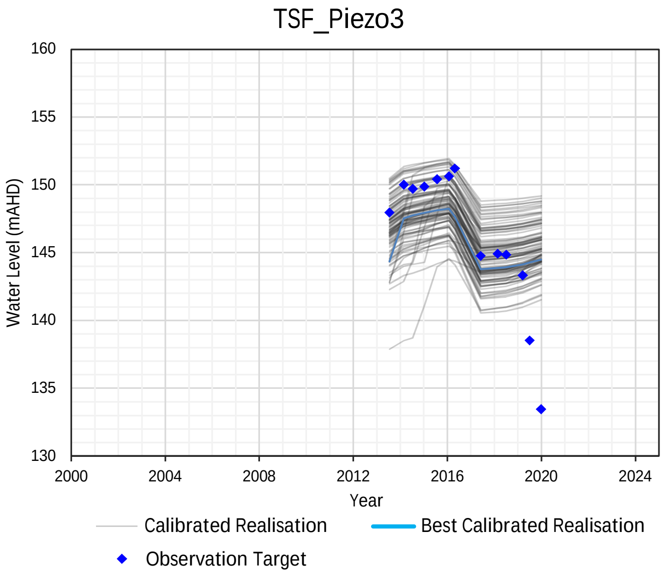

MRMB7
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

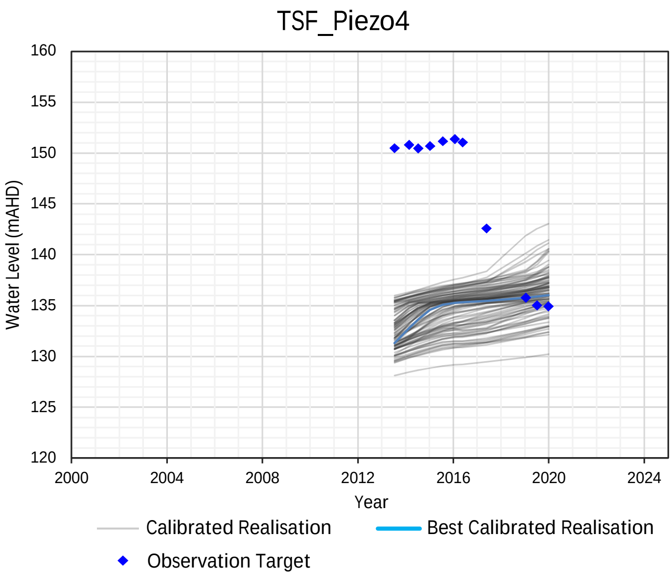

MRMB8
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

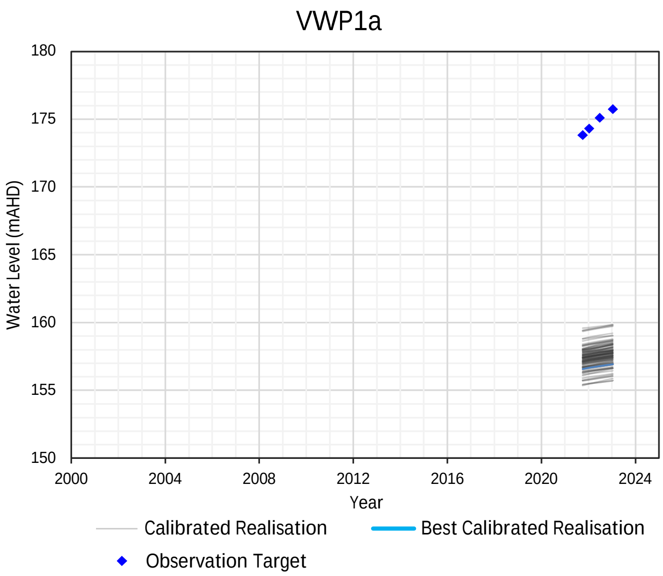

MRMB9
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

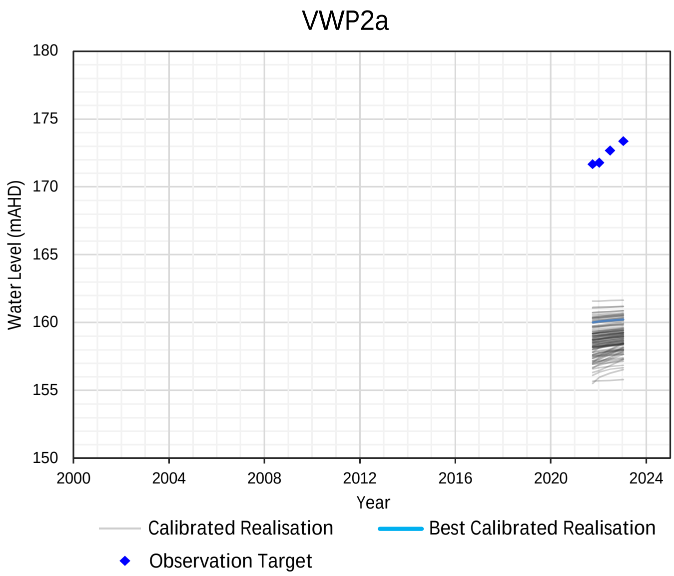

TSF_Piezo1
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

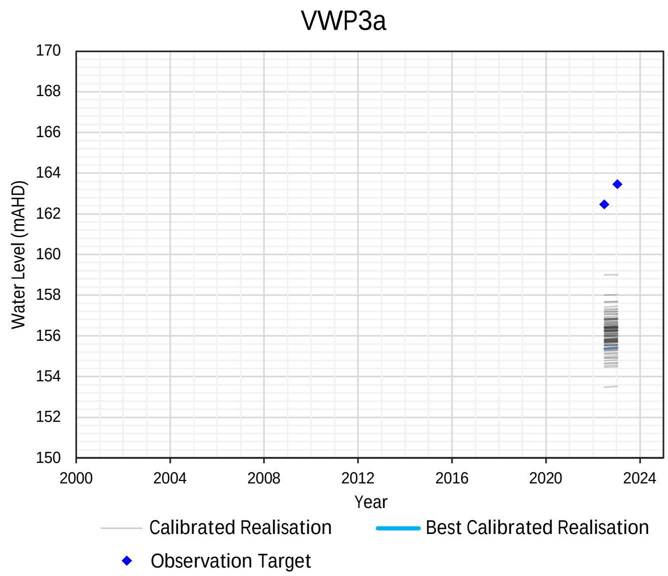

TSF_Piezo2
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

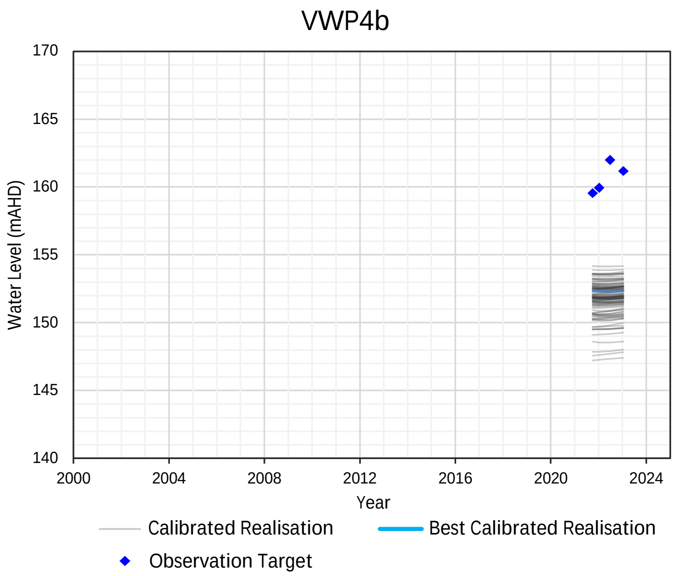

TSF_Piezo3
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

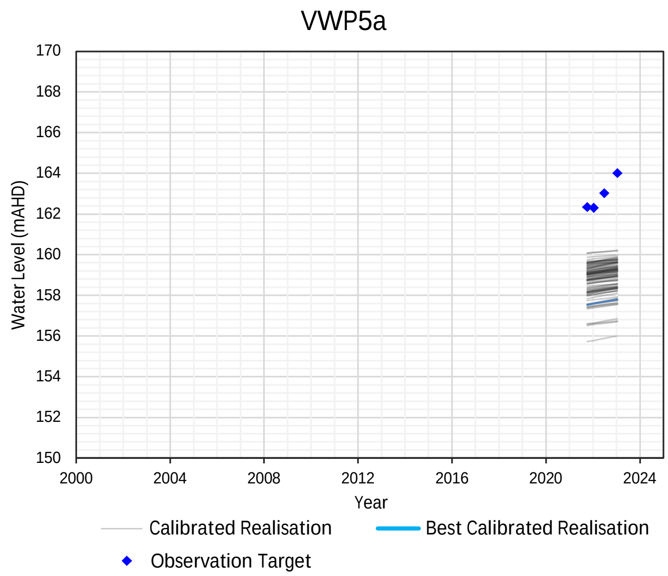

TSF_Piezo4
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target


VWP1a
Water Level (mAHD)
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target


VWP2a
Water Level (mAHD)
180
175
170
165
160
155
150
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target


VWP3a
Water Level (mAHD)
170
168
166
164
162
160
158
156
154
152
150
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target


VWP4b
Water Level (mAHD)
170
165
160
155
150
145
140
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target


VWP5a
Water Level (mAHD)
170
168
166
164
162
160
158
156
154
152
150
2000
2004
2008
2012
2016
2020
2024
Year
Calibrated Realisation
Best Calibrated Realisation
Observation Target

Making Sustainability Happen