

Annual Review 2025

Tarrawonga Coal Mine

Name of operation	Tarrawonga Coal Mine
Name of operator	Whitehaven Coal Mining Pty Ltd
Development consent/project approval number	MP 11_0047
Name of holder of development consent/project approval	Tarrawonga Coal Pty Ltd
Mining lease number	ML 1579, ML 1685, ML 1693, ML1749
Name of holder of mining lease	Tarrawonga Coal Pty Ltd
Water licence number	WAL 31084
Name of holder of water licence	Whitehaven Coal
FWP start date	1/01/2025
FWP end date	31/12/2025
Annual review start date ¹	1/01/2025
Annual review end date	31/12/2025

I, Craig Sullivan, certify that this audit report is a true and accurate record of the compliance status of the Tarrawonga Coal Mine for the period 1st January 2025 until 31st December 2025, and that I am authorised to make this statement on behalf of Tarrawonga Coal Pty Ltd.

Note. a) The Annual Review is an 'environmental audit' for the purposes of section 122B (2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000. b) The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).

Name of authorised reporting officer	
Title of authorised reporting officer	Operations Manager – Tarrawonga Coal Mine
Signature of authorised reporting officer	
Date	30/03/2026

¹ NSW Annual Review Guideline was released in October 2015

TABLE OF CONTENTS

1	STATEMENT OF COMPLIANCE	5
2	INTRODUCTION	7
2.1	Mine Contacts	7
3	APPROVALS	11
3.1	Tenements, Licences and Approvals	11
4	OPERATIONS SUMMARY	14
4.1	Mining Operations.....	14
4.1.1	Other Operations	14
4.1.2	Coal Haulage	15
4.1.3	Exploration	15
4.2	Next Reporting Period	15
4.2.1	Mine operations.....	15
5	ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEW	16
6	ENVIRONMENTAL PERFORMANCE.....	16
6.1	Noise.....	16
6.1.1	Criteria 16	
6.1.2	Environmental Management Measures	17
6.1.3	Key Environmental Performance	19
6.1.4	Proposed Improvements to Environmental Management.....	22
6.2	Blasting	23
6.2.1	Criteria 23	
6.2.2	Key Environmental Performance	23
6.2.3	Proposed Improvements to Environmental Management.....	24
6.3	Air Quality and Greenhouse Gas	26
6.3.1	Criteria 26	
6.3.2	Environmental Management Measures	26
6.3.3	Key Environmental Performance	28
6.3.4	Proposed Improvements to Environmental Management.....	33
6.4	Biodiversity and Offsets	33
6.4.1	Weather Summary of Willeroi Offset Property	34
6.4.2	Infrastructure Management	34
6.4.3	Seed Management	34
6.4.4	Revegetation Management	35
6.4.5	Flora and Fauna Monitoring Program.....	35
6.4.6	Habitat Management.....	36
6.4.7	Pest Animal Management.....	36
6.4.8	Grazing Management.....	37
6.4.9	Soil & Erosion Management	37
6.4.10	Weed Management	38
6.4.11	Audits and Reviews	38
6.4.12	Clearing	38
6.4.13	Key Environmental Performance	39
6.4.14	Proposed Improvements to Environmental Management.....	39
6.5	Aboriginal Heritage Management	39
6.5.1	Environmental Management Measures	39
6.5.2	Key Environmental Performance	40

6.5.3	Proposed Improvements to Environmental Management	40
6.6	Bushfire Management	40
6.6.1	Environmental Management Measures	40
6.6.2	Key Environmental Performance	41
6.6.3	Proposed Improvements to Environmental Management	41
6.7	Meteorological Data	42
6.8	Waste	43
6.8.1	Environmental Management	43
6.8.2	Key Environmental Performance	44
6.8.3	Proposed Improvements to Environmental Management	44
6.9	Environmental Performance Summary	45
7	WATER MANAGEMENT	46
7.1	Surface Water Performance and Management	46
7.1.1	Surface Water Monitoring	47
7.1.2	Water Discharges	48
7.2	Groundwater Management	50
7.2.1	Environmental Performance and Management	50
7.2.2	Groundwater Monitoring	50
7.2.3	Groundwater Management	52
7.2.4	Water Take	53
7.3	Site Water Balance	54
8	REHABILITATION	57
8.1	Post Rehabilitation Land Uses	57
8.2	Rehabilitation Performance during the Reporting Period	57
8.2.1	Status of Mining and Rehabilitation	57
8.2.2	Rehabilitation Fauna and Flora Monitoring	59
8.2.3	Habitat Management	67
8.2.4	Renovation or Removal of Buildings	71
8.2.5	Other Rehabilitation Undertaken	71
8.2.6	Departmental Sign-off of Rehabilitated Areas	71
8.2.7	Variations in Activities against Forward Program	71
8.2.8	Trials, Research Projects and Initiatives	71
8.2.9	Key challenges to Achieving Successful Rehabilitation	72
8.3	Actions for Next Reporting Period	72
8.4	Community Contributions	74
9	INDEPENDENT AUDIT	77
9.1	Independent Biodiversity Audit (EPBC)	77
9.2	Independent Environmental Audit (IEA)	77
9.3	Reportable Incidents	77
9.4	Non-compliances	78
9.5	Regulatory Actions	78
10	ACTIVITIES TO BE COMPLETED IN THE NEXT REPORTING PERIOD ...	79
TABLES		
Table 1-1 - Statement of Compliance		5
Table 1-2- Compliance status key for non-compliances		5
Table 1-3 - Non-Compliance		6
Table 3-1- Tenements, Licences and Approvals		11

Table 4-1 - Production Summary	14
Table 6-1- Noise Compliance	16
Table 6-2 - Attended Noise Monitoring results comparison	19
Table 6-3 - Average Sound Power Levels against EA (2011).....	21
Table 6-4 - Comparison of 2025 Attended Noise Monitoring against Year 5 TCM EA Noise Predictions	22
Table 6 6 shows a comparison of the actual and recalculated total and scope 1 emissions using EA comparable methods against the EA 2012 predictions for 2025. Table 6-5: Comparison of Emissions Compared to Prediction in EA	28
Table 6-6 - Deposited Dust monitoring data summary 2025 [g/month/m ²]	29
Table 6-7 - KPI – 2 Summary of PM10 control factor (TAS, 2025)	33
Table 6-8 - Templemore weather station monitoring data 2025	42
Table 6-9 - Waste management summary.....	43
Table 6-10 - Environmental Performance.....	45
Table 7-1 - Discharge Results 2024	48
Table 7-2 - Water Take.....	54
Table 7-3 - Water Stored and used during the reporting period.....	55
Table 8-1- Rehabilitation Status.....	57
Table 8-2 - Summary of Vertebrae Pest Sighting (2018 - 2025)	69
Table 8-3 - Complaints Summary.....	74
Table 9-1 - Non-compliance Action plan.....	78
Table 10-1 - Summary of activities for 2025.....	79

FIGURES

Figure 1 - Locality Plan	8
Figure 2 - Local Biodiversity Offsets.....	9
Figure 3 - Regional Location of Biobank Site.....	10
Figure 4 - Noise monitoring locations.....	18
Figure 5 - Blast Monitoring Locations	25
Figure 6 - Air quality monitoring locations	27
Figure 7 - HVAS-PM10 24hr average monitoring data (2022-2025).....	30
Figure 8 - Coomalgah HVAS- calculated TSP Monitoring Trend (2021 - 2025).....	31
Figure 9 - 2025 Surface water monitoring locations.....	49
Figure 10 - Groundwater monitoring locations	51
Figure 11 - Tarrawonga Rehabilitation status as of December 2025.....	58
Figure 12 - Analogue site locations – Rehabilitation monitoring 2025.....	60
Figure 13 - Monitoring locations Northern Rehabilitation – Rehabilitation Monitoring 2025.....	61
Figure 14 - Monitoring Locations Southern Rehabilitation - Rehabilitation Monitoring 2025.....	62
Figure 15 - Monitoring Locations Southern Rehabilitation - Rehabilitation Monitoring 2025.....	62

APPENDICES

Appendix 1: Blast Monitoring Data.....	80
Appendix 2: HVAS Monitoring Data.....	81
Appendix 3: SW Monitoring Data	82
Appendix 4: GW Monitoring Data.....	83

1 STATEMENT OF COMPLIANCE

The compliance status of the Tarrawonga Coal Mine (TCM) as at 31st December 2025 is summarised in Table 1-1 and Table 1-2 below.

Table 1-3 notes non-compliances that occurred during the reporting period, and non-compliances from previous reporting periods that still require management action. References to the Environment Protection Licence (EPL) are limited to those that relate to the Project Approval conditions, specifically Schedule 3 Condition 22, 28(c), 33 and 39(c)(ii).

Table 1-1 - Statement of Compliance

Were all conditions of the relevant approval(s) complied with (Yes/No)?	
<i>MP 11_0047</i>	No
<i>ML 1579</i>	Yes
<i>ML 1693</i>	Yes
<i>ML 1685</i>	Yes
<i>ML 1749</i>	Yes
<i>WAL 31084</i>	Yes

Table 1-2- Compliance status key for non-compliances

Risk Level	Colour Code	Description
High	Non-compliant	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Medium	Non-compliant	Non-compliance with: - potential for serious environmental consequences, but is unlikely to occur; or - potential for moderate environmental consequences, but is likely to occur
Low	Non-compliant	Non-compliance with: - potential for moderate environmental consequences, but is unlikely to occur; or - potential for low environmental consequences, but is likely to occur
Administrative non-compliance	Non-compliant	Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions)

Table 1-3 - Non-Compliance

Relevant Approval	Condition Number	Condition Description (summary)	Compliance status	Comment	Where Addressed in Annual Review
<i>Not Applicable</i>					

2 INTRODUCTION

This Annual Review (AR) for Tarrawonga Coal Mine (TCM) has been prepared in accordance with the NSW Government *Annual Review Guideline* (October 2015) and Condition 4 (Schedule 5) of MP 11_0047.

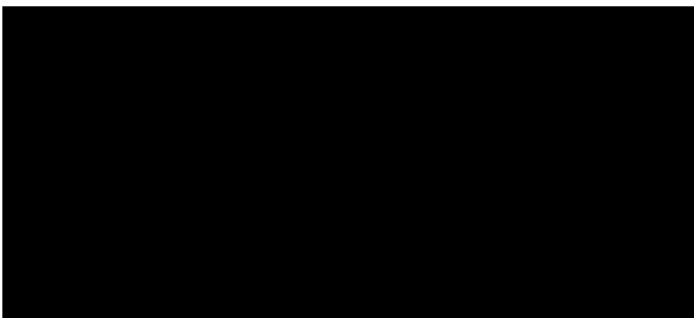
TCM is located approximately 16km east of Boggabri (Refer Figure 1 - Locality Plan). TCM is owned by Tarrawonga Coal Pty Ltd (TCPL) and operated by Whitehaven Coal Mining Pty Ltd (WCMPL). Biodiversity offset locations are shown in Figure 2 and.

Figure 3.

In line with the new standard rehabilitation conditions for all mining leases, TCM has prepared a Rehabilitation Management Plan (RMP) and a Forward Program (FWP) which took effect from 1st January 2023 with the newest iteration to commence on the 1st of January 2026. The AR follows the format required by the NSW Government *Annual Review Guideline* (October 2015). Though primarily covering the period from 1st January 2025 to 31st December 2025 (the reporting period), where relevant the AR provides information on historical aspects of the operations, longer term trends in environmental monitoring results and provides relevant information on activities to be undertaken during the ensuing period, (i.e. from 1st January 2025 to 31st December 2025, or beyond).

2.1 Mine Contacts

The management personnel responsible for operational and environmental performance at the TCM and their relevant contact details are as follows:

- 
-
-

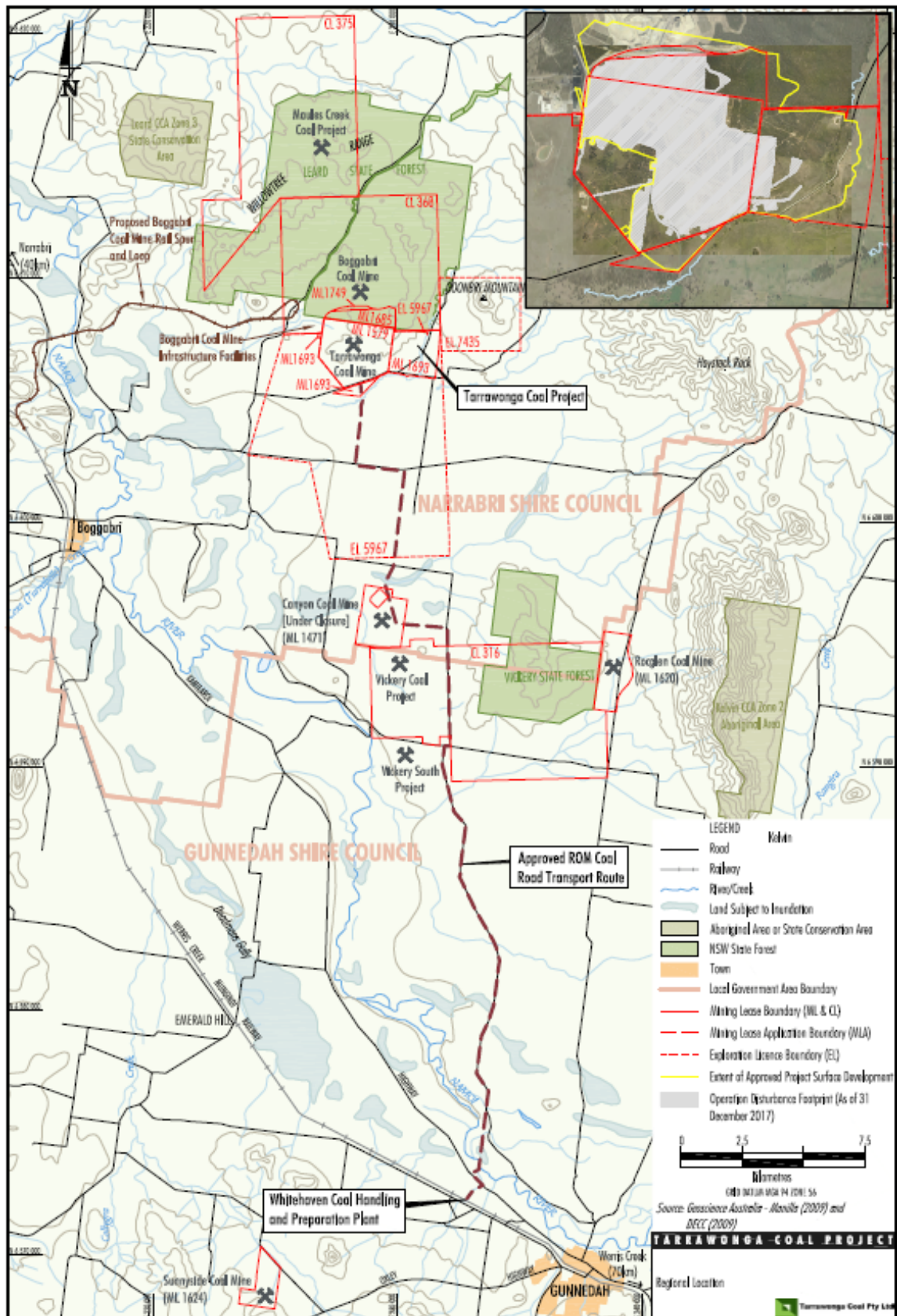


Figure 1 - Locality Plan

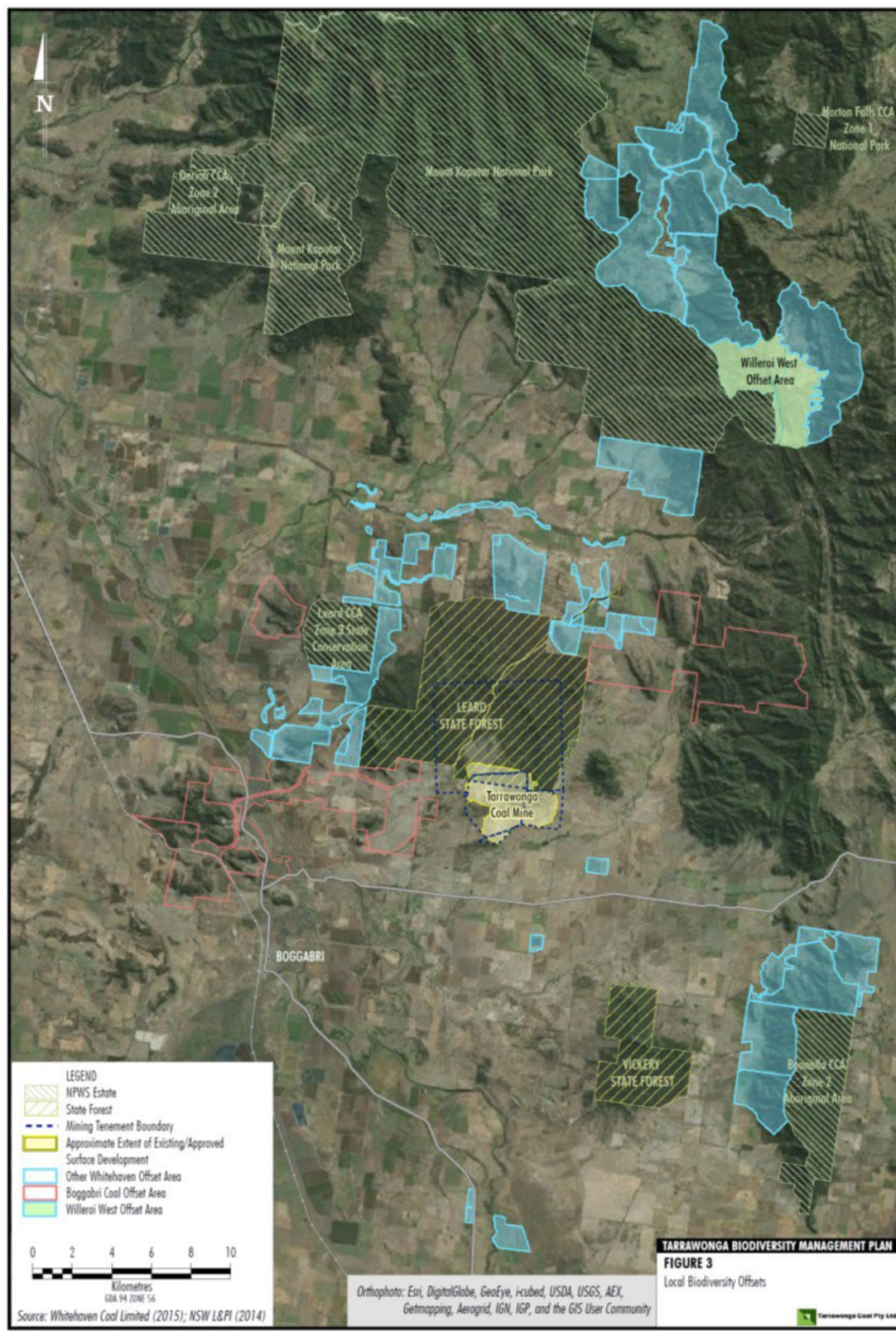


Figure 2 - Local Biodiversity Offsets

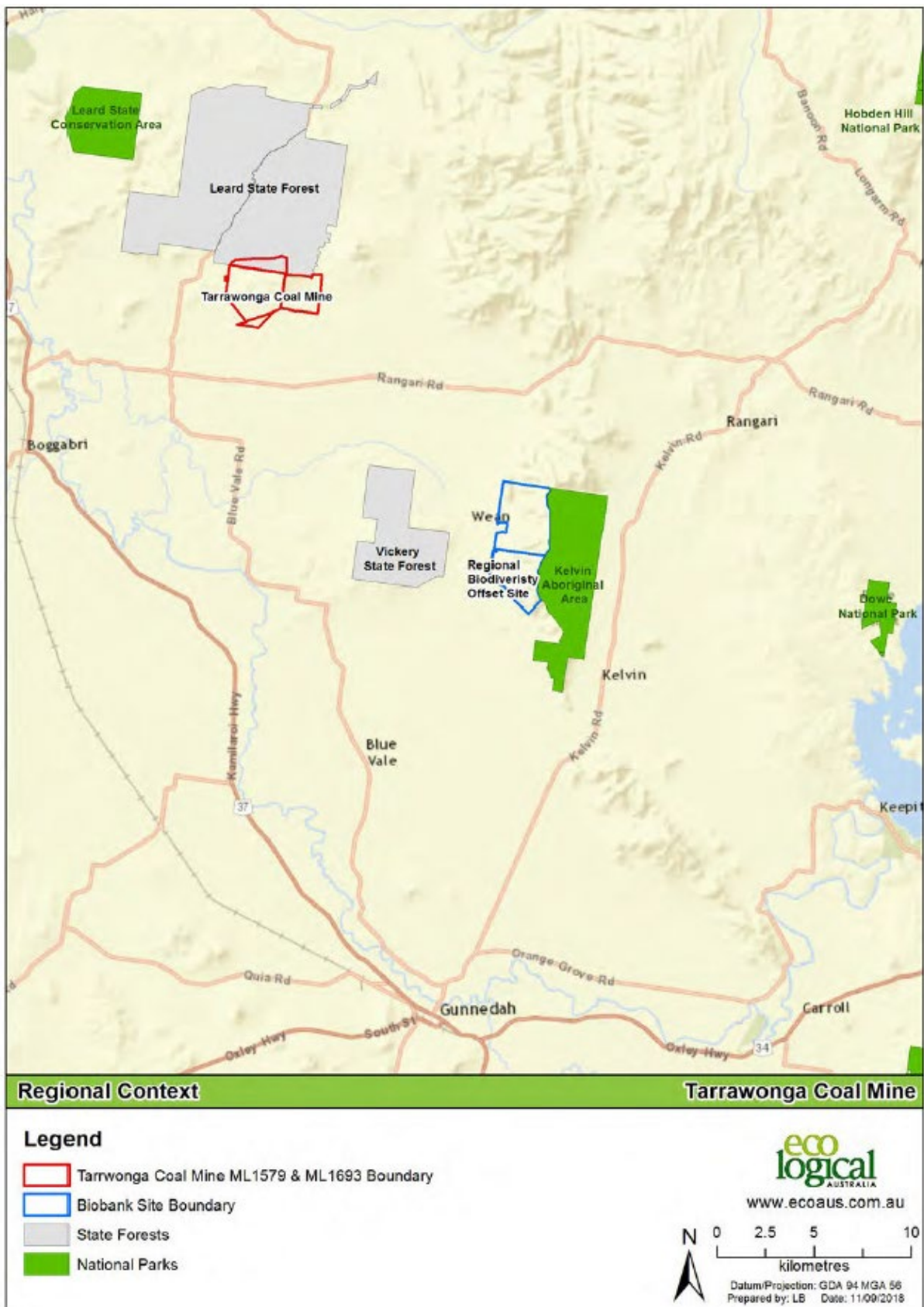


Figure 3 - Regional Location of Biobank Site

3 APPROVALS

3.1 Tenements, Licences and Approvals

Table 3-1 Identifies the approvals in place for the TCM at the end of the reporting period, the issuing/responsible Authority, dates of issue, expiry date and relevant comments.

Table 3-1- Tenements, Licences and Approvals

Issuing / Responsible Authority	Type of Lease, Licence, Approval	Date of Issue	Expiry	Comments
Division of Resources and Energy (DRE)	Exploration Licence (EL 5967)	09/09/2022	24/08/2027	
Environment Protection Authority (EPA)	Environment Protection Licence (EPL) No. 12365	09/01/2006	N/A	EPL12365
Environment Protection Authority (EPA)	Variation- Environment Protection Licence (EPL) No. 12365	13/12/2021	N/A	Variation
NSW Department Primary Industry - Water	90BL253276	18/05/2006	Perpetuity	Monitoring bores 250 units 50 units
	90BL253278	18/05/2006	Perpetuity	
	90BL253279	18/05/2006	Perpetuity	
	90BL253280	18/05/2006	Perpetuity	
	90BL254253	18/05/2006	Perpetuity	
	90BL254254	18/05/2006	Perpetuity	
	90BL254255	24/04/2007	Perpetuity	
	90BL254221	05/04/2007	Perpetuity	
	90BL254214	04/04/2007	Perpetuity	
	90BL255766	19/08/2012	Perpetuity	
Department of Planning Infrastructure & Environment (DPIE)	Project Approval MP 11_0047	22/01/2013	31/12/2030	
	Project Approval MP 11_0047	2014	31/12/2030	MOD1 (continued coal haulage to Gunnedah CHPP)
Department of Planning Infrastructure & Environment (DPIE)	Project Approval MP 11_0047	2016	31/12/2030	MOD2 (allow receipt of all types of coal reject)

Issuing / Responsible Authority	Type of Lease, Licence, Approval	Date of Issue	Expiry	Comments
Department of Planning Infrastructure & Environment (DPIE)	Project Approval MP 11_0047	February 2017	31/12/2030	MOD3 (Traffic Management Plan)
Department of Planning Infrastructure & Environment (DPIE)	Project Approval MP 11_0047	May 2017	31/12/2030	MOD4 (Sound Power Level modification)
Department of Planning Infrastructure & Environment (DPIE)	Project Approval MP 11_0047	August 2017	31/12/2030	MOD5 (Open Cut Augmentation)
Department of Planning Infrastructure & Environment (DPIE)	Project Approval MP 11_0047	October 2018	31/12/2030	MOD6 (Coal Haulage)
Department of Planning Infrastructure & Environment (DPIE)	Project Approval MP 11_0047	June 2020	31/12/2021	MOD8 (Trucking water) for 18 months
Department of Planning Infrastructure & Environment (DPIE)	Project Approval MP 11_0047	February 2021	31/12/2030	MOD7 (Life of Mine)
Department of Planning Infrastructure & Environment (DPIE))	Project Approval MP 11_0047	May 2021	31/12/2030	MOD9 (Disposal of Waste Tyres)
Department of Planning Infrastructure & Environment (DPIE))	Project Approval MP 11_0047	October 2023	31/12/2030	MOD10 (Road Haulage Hours)
Department of Agriculture, Water and Environment (DAWE)	EPBC 2011/5923	11/03/2013	31/12/2053	Conditional Federal Project Approval for LOM Project
Department of Regional NSW – Division of Mining, Exploration and Geoscience (DMEG)	Mining Lease (ML) 1579	03/04/2006	02/04/2027	Expires 21 years from commencement. Varied on 17 October 2022 to include the new standard conditions from <i>Mining Regulation</i>

Issuing / Responsible Authority	Type of Lease, Licence, Approval	Date of Issue	Expiry	Comments
				2016, Schedule 8A, Part 2.
Department of Regional NSW – Division of Mining, Exploration and Geoscience (DMEG)	Mining Lease (ML) 1685	18/07/2013	14/11/2032	Varied on 17 October 2022 to include the new standard conditions from <i>Mining Regulation 2016</i> , Schedule 8A, Part 2.
Department of Regional NSW – Division of Mining, Exploration and Geoscience (DMEG)	Mining Lease (ML) 1693	14/10/2013	14/10/2034	Expires 21 years from commencement. Varied on 17 October 2022 to include the new standard conditions from <i>Mining Regulation 2016</i> , Schedule 8A, Part 2.
Department of Regional NSW – Division of Mining, Exploration and Geoscience (DMEG)	Mining Lease (ML) 1749	17/11/2017	14/11/2032	Varied on 17 October 2022 to include the new standard conditions from <i>Mining Regulation 2016</i> , Schedule 8A, Part 2.
Division of Department of Regional NSW – Division of Mining, Exploration and Geoscience (DMEG)	Forward Program	1/1/2024	31/12/2024	FWP0001345
Department of Planning Infrastructure & Environment (DPIE))	Project Approval MP 11_0047	October 2025	31/12/2030	MOD11 (Haulage route does not exceed 3.8 million tonnes during the 2025 calendar year)

4 OPERATIONS SUMMARY

4.1 Mining Operations

Table 4-1 presents the production summary at the end of the reporting period.

Table 4-1 - Production Summary

Material	Approved Limit (Project Approval PA11_0047)	Previous Reporting Period 2024	This Reporting Period 2025 (actual)	Next Reporting Period 2026 (forecast)
<i>Waste Rock/ Overburden (bcm)</i>	<i>n/a</i>	20,455,182	16,739,800	16,253,903
<i>ROM Coal/Ore (t)</i>	<i>3,500,000</i>	1,900,922	1,424,240	1,294,971
<i>Coarse and Fine Reject (t)</i>	<i>700,000</i>	528,000	379,000	332,000
<i>Saleable Product (t)</i>	<i>n/a</i>	1,529,000	1,193,020	1,007,368
<i>Gravel Production (m³)</i>	<i>90,000</i>	0	0	0

4.1.1 Other Operations

MP 11_0047 permits 24-hour operation of mining activities. Open cut mining activities, including processing of coal, generally occurred between the hours of 6:30 am and 5:00 pm (day shift) and 4:30 pm and 3:00 am (night shift) from Monday to Friday. Processing of coal on day shift also occurs almost every Saturday whereas mining activity on Saturday day shift has only occurred on an occasional basis to meet production deadlines.

4.1.2 Coal Haulage

For the reporting period 1,600,325 tonnes of coal were hauled along the approved haulage route from TCM to the Whitehaven Gunnedah CHPP. During the same period 36,367 tonnes of coal was distributed from TCM to the domestic market. There was 2,156,764 tonnes of coal hauled from Vickery, and no coal hauled from Rocglen Coal Mine during the reporting period. The total tonnage of coal rejects received by TCM during 2025 was 379,000 tonnes. Transport of coal from the site or receipt of coal reject from the Whitehaven CHPP by truck has only occurred during the approved hours of:

- (a) 4.00am to 11.15 pm Monday to Friday;
- (b) 5 am to 7.15 pm Saturday; and
- (c) at no time on Sundays or public holidays.

4.1.3 Exploration

Exploration drilling for resource definition and geological investigation purposes was undertaken during the reporting period within the mining footprint. A total of 39 boreholes were completed inclusive of 2 core and 37 open holes. Full details of exploration activities are included in the Tarrawonga Open Cut Mine group annual reports.

Exploration drilling will continue to be undertaken at the TCM to further assess the coal reserves within the tenements. The current term of exploration license 5967 expires on the 24th of July 2027.

4.2 Next Reporting Period

4.2.1 Mine operations

The mine production rates planned for 2026 are 1,294,971 tonnes per annum of ROM coal and 16,253,903 bank cubic metres (bcm) of overburden during the next calendar year.

Vegetation clearing activities in mining areas over the next reporting period will be conducted in accordance with the approved Biodiversity Management Plan (BMP) and the updated Forward Program. The clearing program will be undertaken during the annual twelve week clearing campaign from the 15th of February to the 30th of April, except under exceptional circumstances and with the approval of the Secretary of the DPHI.

5 ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEW

The 2024 Annual Review was considered to satisfy the reporting requirements of the approval, and the document was accepted by the Department of Planning and Environment on the 03rd of June 2025.

6 ENVIRONMENTAL PERFORMANCE

The following sub-sections document the implementation and effectiveness of the various control strategies adopted at TCM, together with monitoring data for the reporting period. Life of mine monitoring data is included as Appendices in this AR, where relevant, to allow for discussion on longer-term trends.

6.1 Noise

6.1.1 Criteria

The Project Approval (MP 11_0047) and EPL 12365 describe the noise criteria for site operations and coal haulage as seen in Table 6-1.

Table 6-1- Noise Compliance

Noise Criteria dB(A)			
Location	Day, Evening & Night LAeq (15 min)		Night LAeq (1 min)
All other privately-owned residences	35		45
Road Traffic Noise Criteria dB(A) LAeq (1 hour)			
Location	Day	Evening	Night
Any residence on privately-owned land	60	60	55

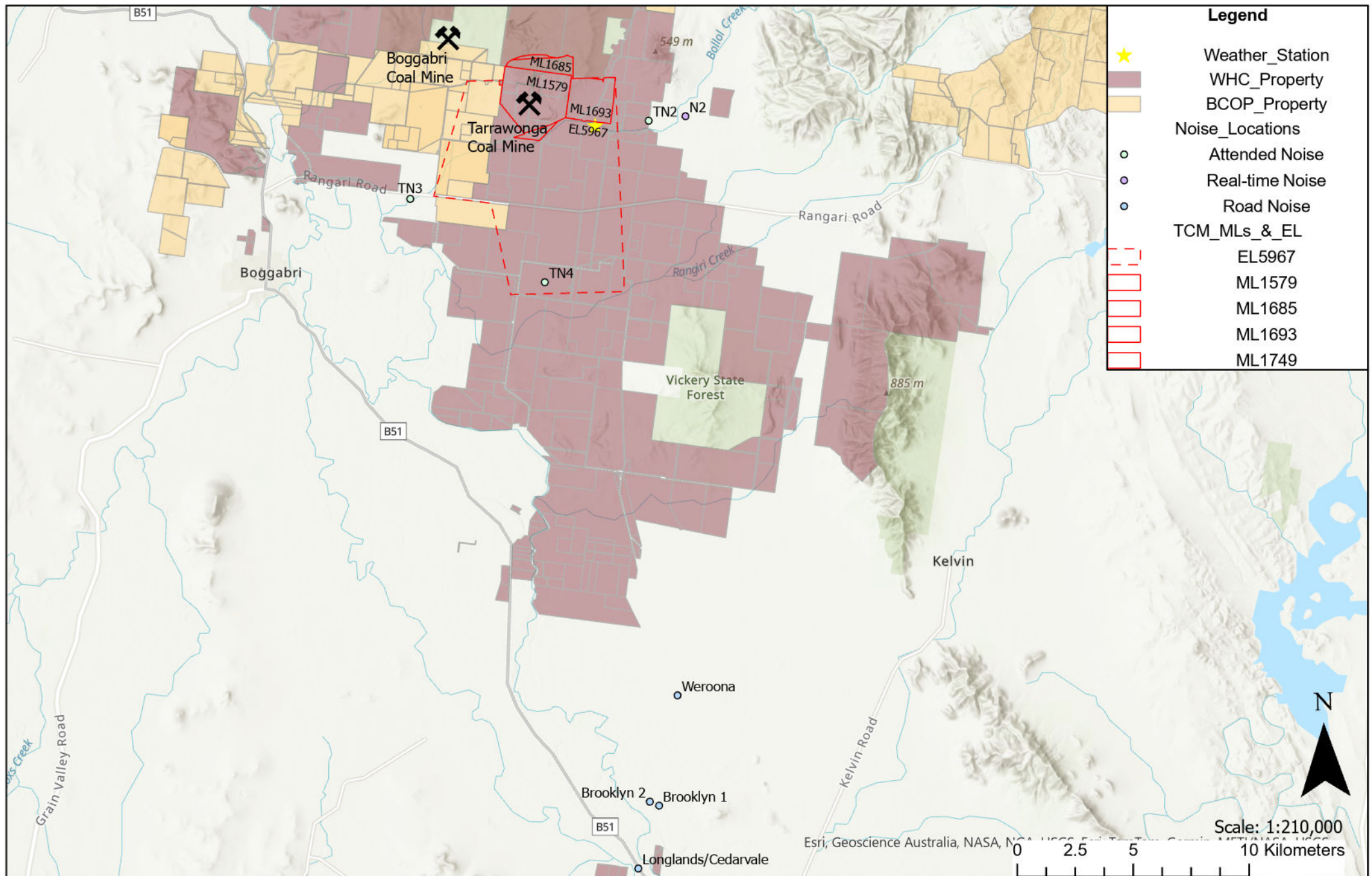
Note: Day = 7:00am –6:00pm; Evening = 6:00pm –10:00pm; Night = 10:00pm –7:00am

A number of other specific conditions (i.e. acquisition, monitoring protocols and cumulative impacts) are listed in the PA and EPL 12365.

6.1.2 Environmental Management Measures

In accordance with the Noise Management Plan, a number of operational measures continue to be implemented on site to maintain compliance with limits. These include but are not limited to:

- Real-time noise monitor and web-based interface;
- Automated SMS alarms notifying site personnel of elevated noise levels approaching noise criteria; and
- Modification of operations where required.



6.1.3 Key Environmental Performance

Attended Noise Monitoring

An independent consultant completed attended noise monitoring programs on a quarterly basis during the reporting period. The noise monitoring sites are identified on Figure 4 and include three sites: “Bungalow” (TN4), “Barbers Lagoon” (TN3) and “Matong-Coomalgah” (TN2) properties. Attended noise monitoring results are shown in the table below and show compliance with the criteria specified in the project approval on all occasions during the reporting period.

Table 6-2 - Attended Noise Monitoring results comparison

	TN2 – Coomalgah*			Limits (day/evening/night/night)
	2023	2024	2025	
Q1	<20 / <20 / <20 / <20	<20 / <21 / <20 / <20	22 / 21 / <20 / 28	35 / 35 / 35 / 45
Q2	<20 / <20 / 23 / <20	30 / 29 / 22 / 25	<20 / <20 / <20 / <20	
Q3	<20 / <20 / 24 / 31	<20 / <20 / 24 / 27	<20 / <20 / 27 / <20	LAeq, 15min/LAeq, 15min/LAeq, 15min/LA1, 1min
Q4	21 / 23 / 32 / 36	<20 / 29 / <20 / 32	<20 / <20 / 32 / <20	
TN3 - Barbers Lagoon				
	2023	2024	2025	
Q1	<20 / <20 / <20 / <20	<20 / <25 / <20 / 34	<20 / <20 / <20 / 28	
Q2	<20 / <20 / 22 / 27	27 / 25 / 27 / 35	<20 / <20 / <20 / <20	
Q3	<20 / 28 / 26 / 30	<20 / 22 / 27 / 32	<20 / 25 / <20 / <20	
Q4	1A / 1A / 28 / 32	<20 / <20 / 27 / 33	<20 / 31 / <20 / <20	
TN4 – Bungalow				
	2023	2024	2025	
Q1	<20 / <20 / <20 / <20	24 / <20 / 31 / 35	<20 / <20 / <20 / 27	
Q2	<20 / 32 / 30 / 40	24 / 30 / 28 / 35	<20 / <20 / <20 / <20	
Q3	<20 / 27 / <20 / <20	<20 / 22 / 27 / 33	<20 / <20 / <20 / <20	
Q4	1A / 26 / 1A / <20	<20 / 22 / 27 / 31	<20 / <20 / <20 / <20	

1q

Note: Above values are the maximum or only measurements recorded for the indicated period.

Key:

1A = Mine noise inaudible

** = taken at TN2 monitor, 9dB reduction to nearest private property not added. Reading within compliance levels.*

Attended noise monitoring to date indicates that results are generally consistent with previous reporting year's results for all other measurements taken. The results of the mine noise levels attributed to TCM shows that it was below all applicable noise criteria in 2025.

Road Noise Monitoring

TCM is required to ensure that the noise generated by road transport along public sections of the coal haulage route was in accordance with the Tarrawonga Noise Management Plan and with Schedule 3 condition 12 of MP 11_0047.

Modification 10 to Project Approval MP 11_0047 has been implemented to incorporate an extension of haulage hours. The revised approved hours for haulage operations are now scheduled from 4:00 am to 11:15 pm, Monday through Friday, and from 5:00 am to 7:15 pm on Saturdays.

Road noise monitoring was undertaken in June and December 2025. The monitoring occurred at the privately owned residences on the “Weroona”, and “Brooklyn” properties located off Blue Vale Road, and a representative location for the “Longlands/Cedarvale” properties on Kamilaroi Highway. Results showed compliance on both monitoring occasions, which is consistent with the predictions of the Whitehaven ROM Coal Haulage Modification Environmental Assessment for the southern section of the approval transport route.

Real Time Noise Monitoring

In accordance with the requirements of MP 11_0047 and EPL 12365, TCM continued to undertake real time noise monitoring and managed noise according to the Noise Management Plan during the reporting period.

Annual Sound Power Level Testing

In December 2025, Sound Power Level (SPL) testing of all the operating fixed and mobile plant was undertaken. According to MOD 4 (May 2017) of the MP 11_0047, there is no criteria applicable for SPL and levels identified in the Noise and Blasting Environmental Assessment (EA, 2011) are only used for comparison purposes. Each plant item was assessed for different types of activities (i.e. Dynamic and Stationary).

A comparison of SPL levels in Table 6-3 below indicates that the overall average measured values for the reporting period were generally consistent with the assumed and modelled values in the EA (2011), expected levels for the type of equipment and with previous years.

To ensure that all equipment is tested and that Production is not adversely affected, TCM’s annual SPL testing continues to be conducted in consistency with other mines throughout NSW, so that all heavy plant is measured on a three yearly basis. The first monitoring program to reflect this was in 2025. Table 6-3 reflects this in that some plant was not available for testing.

Table 6-3 - Average Sound Power Levels against EA (2011)

Type	Average Overall - dB(A)			EA (2011) - Guidance Level
	2023	2024	2025	
Haul Truck - CAT 785C Dump Truck	N/A	N/A	N/A	121
Haul Truck - HITACHI EH4000-AC2	115	116	116	116
Haul Truck - CAT 789 Dump Truck	117.5	119	120	121
Water Carts	114 ¹	114	114	111
Dozers	114	116	114	116
Frontend Loaders	112	112.5	N/A	117
Graders	106.5	N/A	108	108
Drills	N/A	117	N/A	117
Excavator - Hitachi EX5600	113.5	115	114	115
Crushing Plant	N/A	N/A	N/A	113

¹ CAT777D tested. EA SPL is for a CAT773C. Maules Creek EA LwA for CAT777 and CAT773 is 115dB.

² Note: N/A = Plant was not available for testing due to not being operated or was tested in previous years.

Acoustic model annual validation

An independent consultant was engaged to assess and validate the noise model prediction developed in 2011 against the monitoring results for 2025. The validation was conducted in accordance with Schedule 3 Condition 12(g) of MP 11_0047 and the Noise Management Plan (NMP) which states:

“In accordance with the requirements of the consent, TCM will seek validation of the tenth percentile methodology used in the noise impact assessment for the Tarrawonga Coal Project. This will be completed on an annual basis by the provision of a report from an appropriately qualified acoustical consultant, utilising the data obtained over a 12-month period from the monitoring program and providing a comparative assessment against the modelled predictions from the tenth percentile methodology.”

Attended monitoring data for 2025 was compared against the 90th percentile (tenth percentile exceedance levels, statistically the 90th percentile) predicted noise contours for the worst case nighttime Year 5 scenario using the Environmental Noise Model software. Table 6-4 shows a comparison of the 2025 90th percentile operator attended measured noise levels against the corresponding 90th percentile predicted noise levels for each location.

Table 6-4 - Comparison of 2025 Attended Noise Monitoring against Year 5 TCM EA Noise Predictions

Location	2025 90th Percentile Measured Noise Level (dBA)	EA (2011) 90 th Percentile Predicted Noise Level (dBA) ¹	Criterion (dBA)
Matong/Coomalgah	33	32	35
Bungalow	26	31	35
Barber's Lagoon	29	35	35

Note 1: 90th percentile predicted noise levels refer to the 10th percentile exceedance levels in accordance with the tenth percentile methodology.

As displayed in Table 6-4, all measured levels were below the modelled level, confirming that the model has not under-predicted noise levels at the receiver location.

6.1.4 Proposed Improvements to Environmental Management

The Introduction to Site (ITS) process is utilised to ensure commissioned new plant items were tested for sound power levels before use and fitted with noise suppressant technology as required.

6.2 Blasting

6.2.1 Criteria

Blasting criteria for the TCM are noted in MP 11_0047, and Condition L5 of EPL 12365.

- Blasting must only be carried out between 9.00 am and 5.00 pm, Monday to Saturday inclusive. Blasting is not allowed on Sundays, public holidays or at any other time without the written approval of the Director-General.
- A maximum of one (1) blast per day, unless an additional blast is required following a blast misfire and a maximum of 4 blasts per week averaged over a calendar year for the project:
- For non-project related residences, the overpressure level from blasting operations must not:
 - Exceed 115dB (Lin Peak) for more than 5% of the total number of blasts over a period of 12 months; or
 - Exceed 120dB (Lin Peak) at any time.
- For non-project related residences, ground vibration peak particle velocity from the blasting operations must not:
 - Exceed 5mm/s for more than 5% of the total number of blasts over a period of 12 months; and
 - Exceed 10mm/s at any time, at any residence on privately owned land.

6.2.2 Key Environmental Performance

During the reporting period, 104 blasts were initiated.

There were no instances throughout the reporting period where two or more blasts were required to be fired in a single day.

The maximum ground vibration recorded at the compliance monitor during the reporting period was 0.68mm/s recorded at “Coomalgah” on 13th September 2025 which is below the consent criterion of 5mm/s.

All blasts on non-project related residences during the reporting period were within the ground vibration criteria.

The maximum overpressure recorded at the compliance monitor “Coomalgah” during the reporting period was 115.3dB on the 25th of November 2025. As this blast is a single exceedance over all 104 blasts for the reporting period (1 in 104 = ~0.9%), this overpressure exceedance maintains a rolling average of below 5% of all blasts under 115dB, therefor compliant within the approval condition.

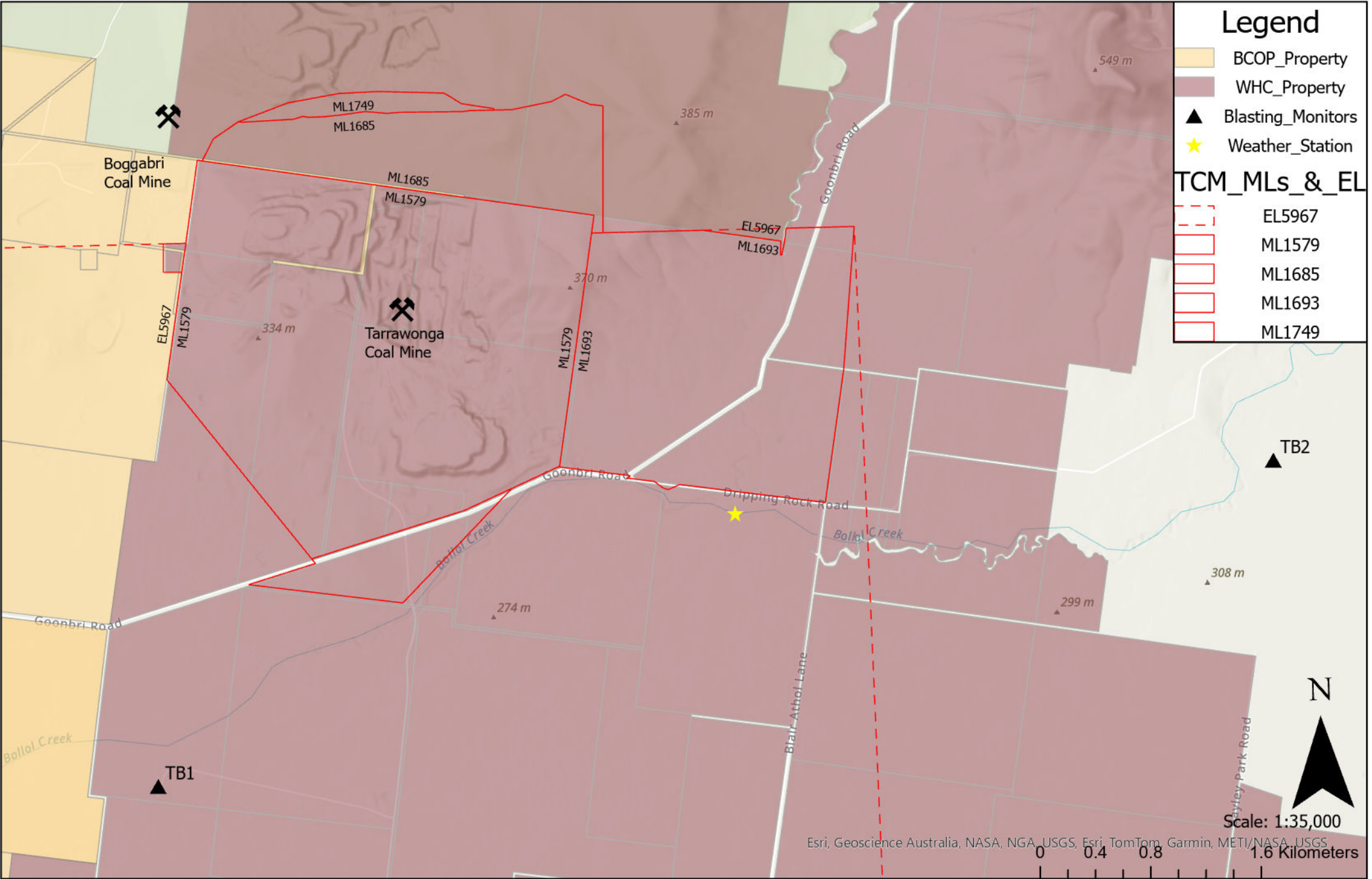
All blasts on non-project related residences during the reporting period were within the overpressure criteria.

Performance during the reporting period was consistent with the EA prediction for blasting.

The maximum fume rating for the reporting period was classified as a '2A' per the *Australian Explosives Industry and Safety Group Inc. – Code of Practice: Prevention and Management of Blast Generated NOx Gases in Surface Blasting*. No instances of blast fume leaving the premises boundary were recorded during the reporting period.

6.2.3 Proposed Improvements to Environmental Management

TCM updated the Blast Management Plan in June 2025. The main purpose of the update was the transfer to the new WHC Management Plan template. The management plan will be reviewed per the project approval conditions.



6.3 Air Quality and Greenhouse Gas

6.3.1 Criteria

The air quality criteria applicable to the TCM are specified in MP 11_0047 Schedule 3. Air quality criteria are summarised below:

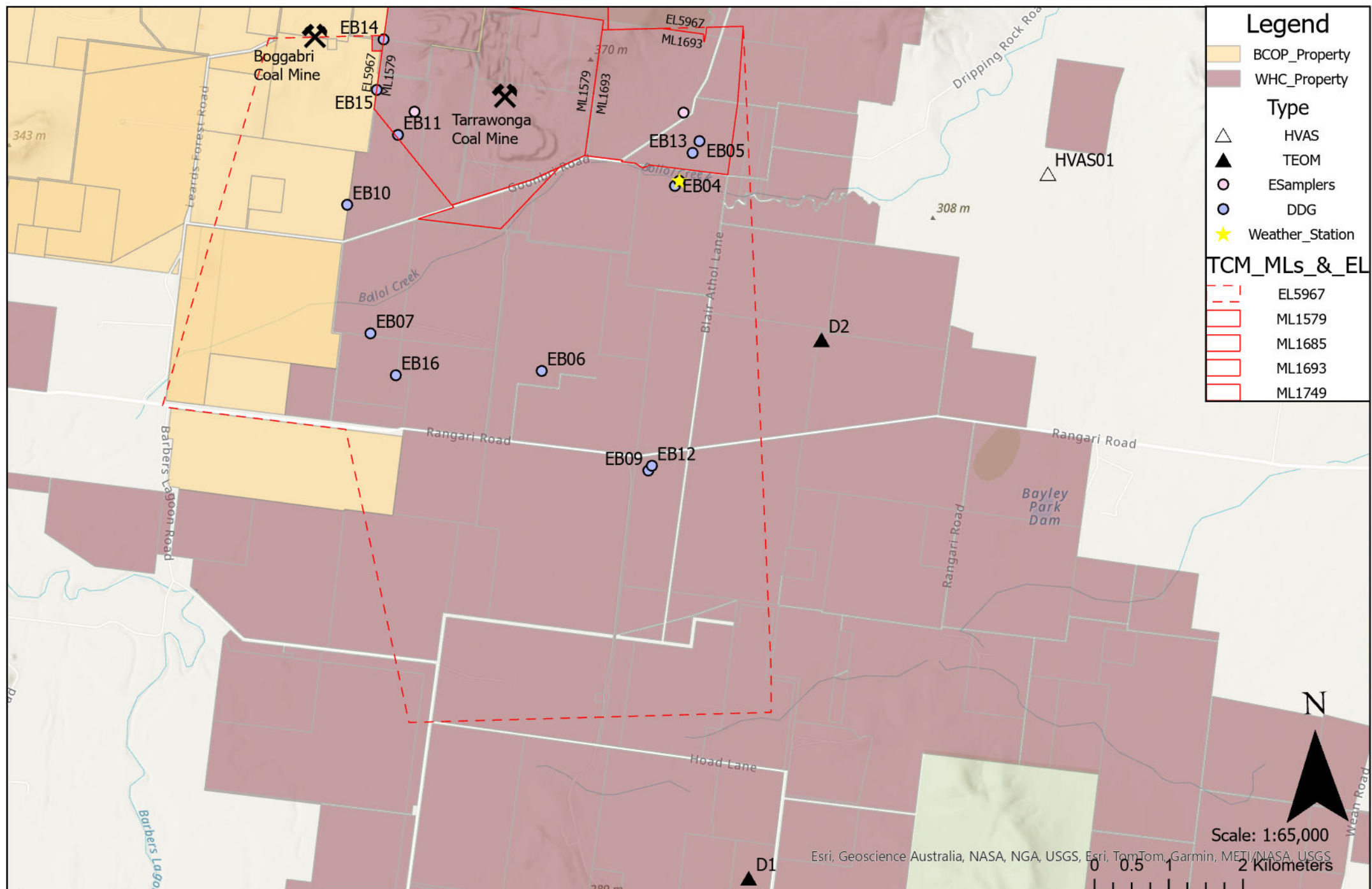
- Acceptable mean annual increase in deposited dust – $2\text{g}/\text{m}^2/\text{month}$.
- Mean annual dust deposition (all sources) – $4\text{g}/\text{m}^2/\text{month}$.
- Mean annual Total Suspended Particles (TSP) (all sources) – $90\text{ }\mu\text{g}/\text{m}^3$.
- Mean annual Particle Matter under 10 microns (PM10) – $30\text{ }\mu\text{g}/\text{m}^3$.
- 24-hour average PM10 particulate level – $50\text{ }\mu\text{g}/\text{m}^3$.

6.3.2 Environmental Management Measures

TCM employs a range of air pollution control measures specified in the Air Quality and Greenhouse Gas Management Plan (AQGGMP), including:

- Maintaining a real time SMS alarming system to key operational personnel of higher trends in PM10 data at Flixton TEOM;
- Using a prediction and dust forecasting system;
- Modification of work practices where required including changing of excavation and dumping strategies;
- Limiting ground cover removal in advance of mining consistent with operational requirements;
- Dust suppression using water and dust suppressant additive products on haul roads and the use of water while drilling and crushing to reduce airborne dust emissions;
- Progressive shaping and rehabilitation of areas once they are no longer required for mining purposes;
- Speed limit restrictions on all vehicles and equipment on the mine site;
- Use of covers on the trays of all product coal trucks. All coal haulage vehicles (road trucks only), including those operated by sub-contractors, are fitted with roll-over tarpaulins.

Figure 6 displays the air quality monitoring locations including the deposited dust gauges (DDG), two Tapered Element Oscillating Micro balance units (TEOM) installed on project related properties (Flixton and Wil-gai), three mobile real-time dust samplers (E-samplers) installed near the mine boundary and one High Volume Air Sampler (HVAS) on privately owned property (Coomalghah) operating and serviced during the reporting period.



6.3.3 Key Environmental Performance

Greenhouse Gas

GHG emissions are reported through participation in the National Pollutant Inventory (NPI) and as part of the Whitehaven Group in the National Greenhouse and Energy Reporting Scheme (NGERS). The total of Scope 1 and Scope 2 GHG emissions attributed to TCM reported for the

FY2025 reporting year were 68,377 t CO₂-e. This shows a 10% decrease on FY2024 consistent with a slight decrease in diesel and ROM production in 2025 FY. The FY2025 EA prediction was 208,927 t CO₂-e.

The fugitive emissions methodologies used for FY2025 GHG reporting and EA predictions are not directly comparable. EA predictions used Method 1, which applies a default emissions factor. FY2025 GHG reporting used Method 2, based on an operational emissions model. This model was developed from a comprehensive gas sampling program to determine site-specific emission factors for each coal seam. Fugitive emissions at TCM have been reported using Method 2 since 2016.

To enable comparison between EA predictions and reported emissions, fugitive emissions for the reporting year have been recalculated using Method 1. Method 2, and the associated emissions model, cannot be retrospectively applied to EA predictions, as the gas model depends on coal mined from seams during the reporting period.

24,593kL of diesel (stationery and transport use) was consumed in FY2025 equating to 66,642 tCO₂-e GHG Emissions. The diesel emissions are higher than the EA prediction for FY2025 of 57,222t CO₂-e.

Table 6 6 shows a comparison of the actual and recalculated total and scope 1 emissions using EA comparable methods against the EA 2012 predictions for 2025. Table 6-5: Comparison of Emissions Compared to Prediction in EA

	Predicted GHG Emissions (EA 2021)	Actual emissions FY23 (Method 2)	Recalculated emissions FY23 (Method 1)
Scope 1	208,927 t CO ₂ -e	68,377 t CO ₂ -e	164,186 t CO ₂ -e
Total Emissions	208,927 t CO ₂ -e	68,377 t CO ₂ -e	164,196 t CO ₂ -e

As displayed in Table 6-5, the actual and recalculated total and scope 1 emissions using an EA comparable method were below EA predictions.

Scope 2 emissions

Approximately 14,582 kWh electricity was purchased by the mine during the FY2025 reporting period equating to 10 t CO₂-e GHG emissions. Tarrawonga is not connected to the electricity grid and relies on generators for power generation. The electricity purchased was from TCM owned properties that contain monitoring equipment. Since late 2022, WHC NSW operations including TCM have offset Scope 2 emissions by purchasing carbon neutral electricity.

Dust Deposition Gauges:

Table 6-6 details the monthly dust deposition levels measured at 10 dust deposition gauges (DDG). All monitoring locations, recorded average dust deposition below 4g/m²/month and within compliance with Sch 3 Cn 24 of MP 11_0047.

Table 6-6 - Deposited Dust monitoring data summary 2025 [g/month/m²]

MONTH	TEMPLEMORE (EB-4) ¹	BOLLOL CREEK STN (EB-5) ¹	AMBARDO (EB-6) ¹	TARRAWONGA (EB-7) ¹	PINE GROVE (EB-9) ¹	TARRAWONGA MINE (EB-10) ¹	TARRAWONGA MINE (EB-11) ¹	TARRAWONGA MINE (EB-14) ¹	TARRAWONGA MINE (EB-15) ¹	JERALONG NORTH (EB-16) ²
Jan-25	5.3c	1.8	0.8	1.3	1.3	4.3c	2.8	2.8	1.1	3.1c
Feb-25	3.0	1.6	0.9	1.2	0.6	1.9	4.4	2.9	1.2	5.5c
Mar-25	1.4	0.9	0.5	0.5	0.7	0.7	2.6	1.1	1.3	1.4
Apr-25	1.2	1.2	0.8	0.4	1.9	0.7	4.0	3.6	1.2	3.7
May-25	1.1	1.4	1.0	1.2	1.1	4.9	5.3	7.4c	1.9	0.9
Jun-25	1.1	1.1	0.7	0.6	0.7	0.9	5.5	4.3c	0.7	1.5
Jul-25	1.7	1.2	0.2	0.2	0.3	0.8	1.4	4.0c	0.6	0.5
Aug-25	4.2	0.8	0.2	0.4	0.6	0.8	4.3	1.3	0.7	0.6
Sep-25	1.4	1.1	0.6	1.1	0.8	4.2c	5.6	3.4	1.5	0.9
Oct-25	1.2	2.2	0.9	1.4	0.8	4.3c	3.8	3.1	3.2c	0.7
Nov-25	3.7c	3.1	1.9	3.0c	1.9	1.9	4.7	4.5c	3.2c	7.6c
Dec-25	5.1c	1.9	2.2	1.2	1.2	5.3c	2.7	3.7	6.2c	2.9
2025 Average	2.5	1.5	0.9	1.0	1.0	2.6	3.9	3.5	1.9	2.4

C= Results contaminated by deposits deemed unrelated to mining activities (bird droppings, insects and vegetation).

High Volume Air Sampler (HVAS)

TCM has one HVAS which is located at the privately-owned property “Coomalgah”. All the results recorded at the HVAS are summarised in Appendix 2.

The PM₁₀ annual average at Coomalgah was 13.7 µg/m³, which is below the 30 µg/m³ criterion specified in Schedule 3 condition 24.

PM₁₀ measurements have been graphitised in Figure 7 and shows the trend from 2022 to December 2025 (excluding the values measured during days of “adverse weather”).

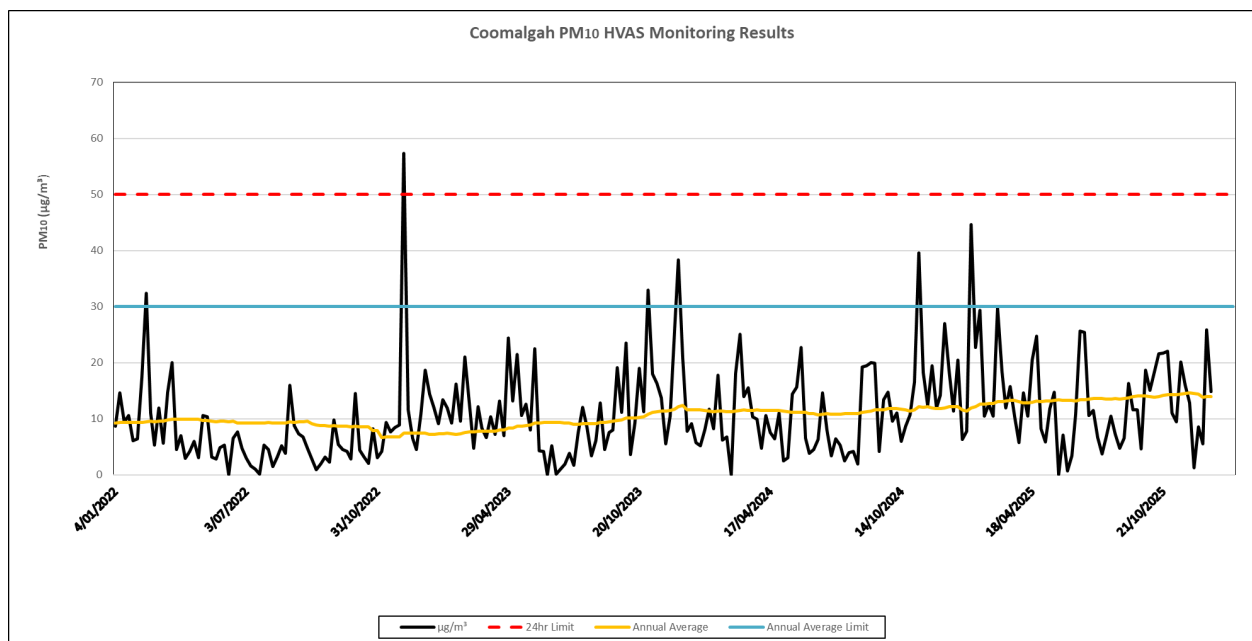


Figure 7 - HVAS-PM₁₀ 24hr average monitoring data (2022-2025)

Total Suspended Particulate (TSP) is calculated from the measured PM₁₀ data using monitoring conducted at the ‘Coomalgah’ HVAS. Results indicated the TSP rolling annual average remained below the applicable criteria of 90 µg/m for the reporting period. These are illustrated in Figure 8.

The EA predicted no exceedance of the annual average TSP criterion. TSP results inferred from PM₁₀ data were consistent with the EA for the reporting period.

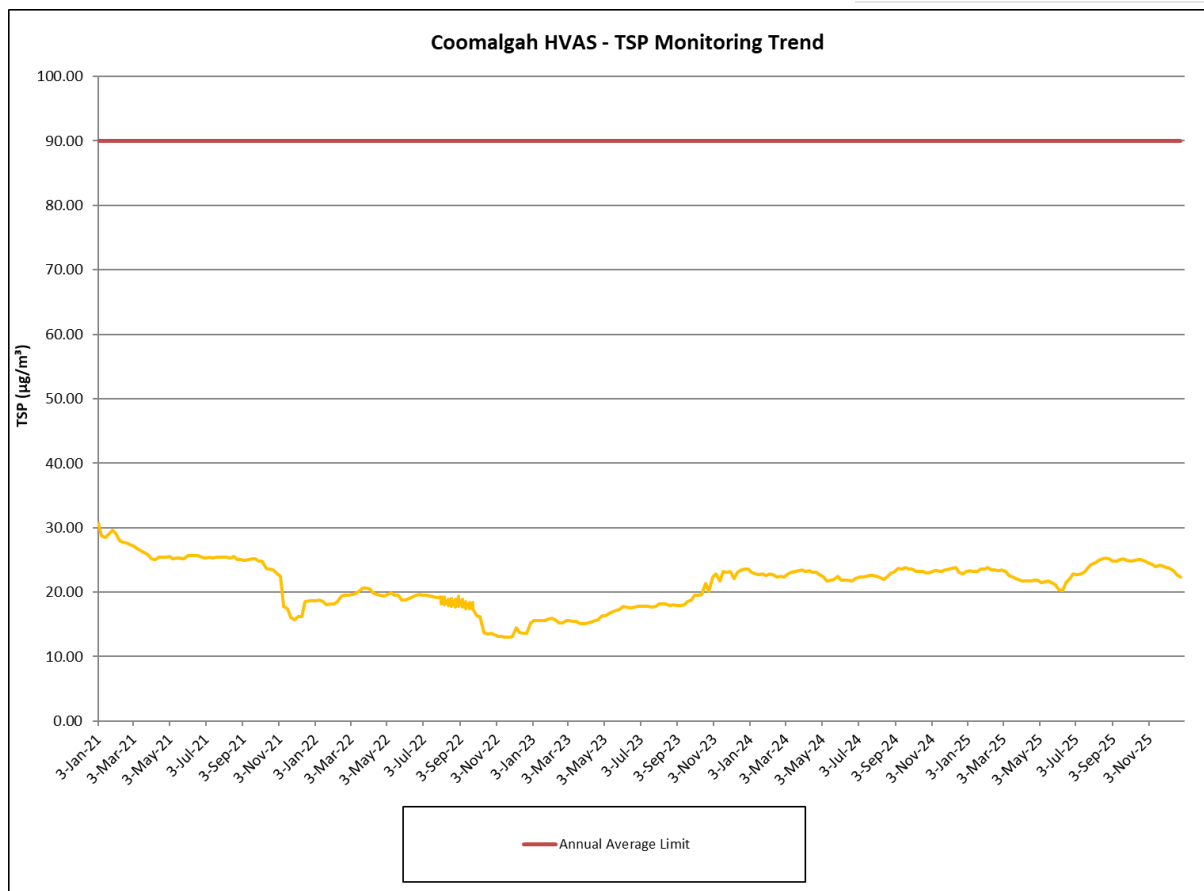


Figure 8 - Coomalgal HVAS- calculated TSP Monitoring Trend (2021 - 2025)

E-samplers

Three (3) E-samplers are installed on mine owned land (no criterion applies) and monitor continuously and real-time PM₁₀ levels. The monitors are used as a management tool to facilitate the day to day mine operations and for investigation purposes.

TEOMs

Throughout the reporting period, the TEOM located on a mine owned property 'Flixton' monitored continuously and real-time PM₁₀ levels. The monitor is used as a management tool to facilitate the day to day mine operations and therefore there is no criterion applicable at that location.

Results recorded at the PM_{2.5} monitor on the project related property 'Wil-gai' remained generally consistent with those recorded during previous reporting periods for most of the year. The Air Quality Greenhouse Gas Management Plan (AQGHGMP) states that whilst no criteria apply, TCM will compare results against PM_{2.5} annual average target level (no levels stipulated within the project approval) of 8.0 µg/m³ and target level of 25µg/m³ for 24hr average. Including all the valid PM_{2.5} 24hr average values measured during the reporting period, the annual average calculated is 7.5 µg /m³.

An air specialist prepared a report to assess TCM performance against the Key Performance Indicators (KPI's) listed in Table 6-5 of *Tarrawonga Coal Mine – Particulate Matter Control Best Practice Pollution Reduction Program (PRP)*. The assessment of KPI-1, KPI-2 and KPI-4 has shown that:

- KPI – 1 (PM₁₀/ROM (kilograms/tonne))

For 2025, calculated PM₁₀ was 454,195kg/year and ROM was 1,609,187t/year giving a PM₁₀/ROM ratio of 0.3 (kg/t) which is a low value and is generally consistent with the baseline required and specified in the PRP.

- KPI – 2 (PM₁₀ Emission Control (%)):

The level of control applied to operations has not changed since the PRP. As the level of dust control applied to activities at TCM has not changed from previous years the KPI-2 value would also be unchanged.

Table 6-7 - KPI – 2 Summary of PM10 control factor (TAS, 2025)

Mining Activity	Current Control Factor	Control Factor with additional best practicable controls.	K2y
<i>Hauling on unsealed roads</i>	75	80	94%
<i>Unloading Coal to hopper</i>	30	79	38%
<i>Wind Erosion and Maintenance – Stockpiles</i>	25	62.5	40%

- KPI – 4 (Water Intensity for Hauling (L/VKT)):

The calculated level of watering for KPI-4 during 2025 (ignoring the additional benefit of dust suppressant) is similar to the value required to achieve an average dust control efficiency of greater than 80% (noting that for the 2013-2014 period a control level of 89-94% was measured).

The mine implemented additional dust controls on the haul roads in the form of dust suppressant in 2018 to increase the control of dust and reduce the amount of water needed, which can affect the utility of the KPI as it stands. It can be seen in 2019, which was a drought year, the use of dust suppressant resulted in significantly less water required to maintain an 80% control level.

It is thus recommended that if a KPI for haul road watering/dust control is to be used in future, the KPI may need to be modified to account for the use of a dust suppressant (if used throughout the year) and also for any significant anomaly in the annual rainfall. Not accounting for these factors means that the KPI may not be as readily comparable between dry and wet years.

Nevertheless, the current KPI shows that sufficient water was added in 2025 to maintain the required control level (even when ignoring the additional benefit from dust suppressant).

6.3.4 Proposed Improvements to Environmental Management

The predictive air dispersion model system will continue to be implemented in accordance with the BTM Air Quality Management Strategy. The Air Quality and Greenhouse Gas Management plan will be reviewed, updated and submitted as necessary.

6.4 Biodiversity and Offsets

The revised Tarrawonga Offset Management Plan 2025 including the Revised Tarrawonga Biodiversity Offset Strategy (AMBS, 2024) was approved by NSW DPHI on 3 November 2025; initially by the Commonwealth DCCEEW on 25 July 2025 and subsequently notified of the administrative update to the OMP on 24 October 2025. The OMP outlines a Revised Biodiversity Offset Strategy (RBOS) for

Willeroi West (the approved Offset Area for the Tarrawonga Coal Mine (TCM)) of maintaining and improving 1,660ha of native woodland and forest adjacent to the south eastern boundary of Mount Kaputar National Park that is part of the original Willeroi property and collectively known as the Tarrawonga Biodiversity Management Area (BMA).

6.4.1 Weather Summary of Willeroi Offset Property

Regionally central meteorological station to the BMA is the Gunnedah Airport site (BOM 2025) which has recorded highly variable rainfall from the driest on record of 233mm back in 2019, followed by above average rainfall years in 2020, 2021 and 2022 of 844mm, 990mm and 860mm respectively (resulting in a numerous of major flooding events of the Namoi River). Subsequently 2023 and 2024, the Gunnedah Airport site (BOM 2024) recorded 496mm and 572mm which are closer to the annual average rainfall of 572mm. Flooding of the Namoi River was experienced again in August 2025 with a return to above average annual rainfall for 2025 of 755mm. WHC maintains a meteorological station within the Tarrawonga BMA and a summary of weather conditions experienced during the 2025 reporting period being the maximum monthly average temperature was 31°C in January 2025. Minimum monthly average temperature was 7°C in July 2025. Annual temperature ranges were 2°C to 37°C in 2025. The total annual rainfall in 2025 was 662mm with the maximum in March (105mm) and minimum in June (21mm).

6.4.2 Infrastructure Management

Existing fencing, signage and gates continue to restrict unauthorised access and minimise livestock incursion with no additional infrastructure or fencing work required on the Willeroi West BMA during the reporting period. Any remaining derelict assets/infrastructure items will continue to be assessed, removed, and remediated as required prior to potential transfer of the Willeroi BMA to National Park Estate.

6.4.3 Seed Management

The routine seed assessments for the Tarrawonga BMA aims to identify on a seasonal basis the life cycle stage and development of native plants to identify what, where, when and how to target appropriate resources to collect seed for future revegetation programs. As there were no revegetation works during the reporting period, there was no seed required to be collected across the Willeroi West BMA.

6.4.4 Revegetation Management

The Tarrawonga BMA revegetation strategy focuses on restoration and revegetation of previously cleared non-native grassland and derived native grasslands and assisting natural regeneration in better quality woodland areas. The revegetation program was successfully completed for the Willeroi West BMA in the 2019 reporting period with good survival achieved to date. There was no additional revegetation works required on the Tarrawonga BMA during this reporting period.

6.4.5 Flora and Fauna Monitoring Program

The 2025 ecological monitoring program of the Willeroi West BOA included winter bird surveys that were undertaken in July and August 2025; fauna surveys involved 27 bird survey sites, 12 echolocation sites, 4 harp trap sites, 15 active forage sites, 7 passive acoustic recorder sites, 10 motion detection camera sites completed between January 2025 and December 2025 and annual spring flora monitoring of 25 plots across four vegetation zones (VZs) undertaken during September 2025.

During the winter bird surveys, four threatened species (Dusky Woodswallow, Diamond Firetail, Little Lorikeet, and Turquoise Parrot) were recorded. Monitoring results from diurnal bird surveys recorded an overall total of 91 bird species at 27 bird survey sites compared to 97 species in 2024. For remnant woodland sites, diurnal bird surveys recorded 74 bird species (average 20.7, range 15-26). For naturally regenerating sites, diurnal bird surveys recorded 78 species naturally sites (average 19, range 10-28). For revegetation/rehabilitation sites; diurnal bird surveys recorded 42 species (average 9.6, range 7-12). Monitoring results from microbat surveys recorded an overall 22 species (positively identified from echolocation recordings) across 12 echolocation sites including 7 species listed as threatened under the BC Act. Species richness from microbat surveys recorded 19 species at remnant woodland sites (average 10.3, range 4-15), 17 species in naturally regenerating sites (11.25, range 10-14) and 15 species in revegetated sites (average 8.66, range 6-12). Monitoring results from active forage surveys recorded an overall 21 species of vertebrate fauna captured across 15 active forage sites. Species richness from pitfall trap surveys recorded 15 species in remnant woodland sites (average 5, range 4-7), 9 species in naturally regenerating sites (average 3.67, range 3-5) and 6 species in revegetated woodland sites (average 1.2, range 1-2). A total of 21 species of animal were detected on the motion detection cameras, including 7 introduced species each.

During flora monitoring, three VZs (VZ 14, 15 and 17) were recorded as meeting or exceeding completion criteria for all four biometrics. Native plant species richness (NPS) completion criteria (native species richness benchmark for relevant biometric vegetation communities) were met or exceeded at all four VZs. Native overstorey cover (NOS) completion criteria (minimum benchmark for

relevant biometric vegetation communities) was met or exceeded at 3 out of 4 VZs. Native midstorey cover (NMS) completion criteria (minimum benchmark for relevant biometric vegetation communities) was met or exceeded at all four VZs. Native ground cover grass (NGCG) completion criteria (minimum benchmark for relevant biometric vegetation communities) were met or exceeded at all four VZs. Comparison of individual plot data shows that NPS increased from 24 out of 25 plots meeting or exceeding completion criteria in 2024, to all 25 plots in 2025. Native overstorey cover (NOS) increased from 18 out of 25 plots meeting or exceeding completion criteria in 2024, to 19 out of 25 plots in 2025. Native midstorey cover (NMS) remained consistent between 2024 and 2025, with 18 out of 25 plots meeting or exceeding completion criteria in both years. Native ground cover grass (NGCG) remained consistent between 2024 and 2025, with 24 out of 25 plots meeting or exceeding completion criteria in both years.

6.4.6 Habitat Management

During the reporting period, habitat augmentation was undertaken with 17 new nest boxes targeted for Small Gliders, Microbats, Turquoise Parrots and Pale-headed Snakes installed on the Tarrawonga BMA. This brings the total habitat augmentation constructed on Tarrawonga BMA to 154 nest boxes since 2021 in accordance with the Leard Forest Regional Biodiversity Strategy.

The Leard Forest Regional Biodiversity Strategy (Umwelt, 2017) Stage 2 Strategy considered adaptive management such as ecological thinning for Box Gum Woodland restoration. Since 2020, an Ecological Thinning Assessment (Stage 1 AMBS, 2020) concluded that there was no evidence of direct impacts from *Callitris* (Cypress Pine) regrowth to native plant species richness (composition) or density (structure) within remnant Box Gum Woodland vegetation communities. Further Ecological Thinning Assessment (Stage 2 AMBS, 2022) concluded that no areas on MCCM BMA supported inappropriate *Callitris* regrowth therefore ecological thinning management could not be justified at this point in time. Follow up Ecological Thinning Assessment (Stage 3 AMBS, 2024) did not find any substantive change between *Callitris* regrowth and biodiversity values supporting the conclusion that ecological thinning is not required but should be repeated in 5 years' time to reevaluate the potential correlation between cover and diversity of *Callitris* in Box Gum Woodland overtime.

6.4.7 Pest Animal Management

WHC aims to apply an even and consistent pest animal management effort by routinely scheduling rolling monitoring and control programs across the Tarrawonga BMA. This standardised approach can also be supplemented with periodic targeted programs that focus on specific areas with high pest animal detection, or, on species which have increasing rates of detection. Both the overall

management and targeted programs are planned using data collected from grid-based motion detection camera monitoring program, pest animal observations and the results of previous control programs. Monitoring demonstrated that certain animals like Eastern Grey Kangaroos were highly detectable across the year plus Feral Pigs, Feral Goats, Foxes and Feral Rabbits/Hares moderately detectable seasonally. All other pest animal species had scarce to low detection levels across 2025. The pest animal monitoring ensures that timely and prioritised pest animal control is undertaken on a seasonal basis identifying what, where, when and how to target appropriate resources across the Tarrawonga BMA for pest animal management. During the reporting period, WHC implemented a pest animal control program across the Tarrawonga BMA with routine 1080 canid pest ejectors as well as Hoggone baits and trapping programs as well as Open Range Shooting undertaken throughout 2025. During the reporting period, there were 35 canid pest ejectors triggered from 114 deployed and 40 Hoggone baits consumed from 102 presented across the Tarrawonga BMA. A further 6 Feral Pigs were trapped and removed from the Tarrawonga BMA. Open range shooting programs were implemented in conjunction with the other pest animal programs resulting in an additional 4 Feral Pigs being controlled in 2025. Feral Goat mustering continued during the reporting period resulting in 100 Goats being captured with saleable Goats on sold to an abattoir. Only appropriately qualified and experienced feral animal contractors (appropriate feral animal management qualifications, NSW firearm licence and pesticide accreditation where relevant) were engaged to undertake feral animal control works for WHC.

6.4.8 Grazing Management

Tarrawonga BMA was destocked in 2015 and continued to be destocked with no strategic grazing occurring during the reporting period. There were no instances of stock incursion during the reporting period.

6.4.9 Soil & Erosion Management

Annual inspections were undertaken including unsealed access tracks and associated drainage structures across the Tarrawonga BMA to review appropriate erosion and sediment control measures required in accordance with the Blue Book (Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004)). A total of 13 observations were recorded within the Tarrawonga BMA with no locations requiring targeted additional track maintenance. The remaining tracks/drainage structures are maintained during routine access track maintenance program. There are also a number of legacy erosion sites inherited from previous owners' management regimes that are subject to a separate annual inspection process and updates to the WHC erosion register made. During the

reporting period, monitoring or remediation actions and investigations commensurate to the risk were undertaken for the erosion sites identified within Tarrawonga BMA.

6.4.10 Weed Management

WHC coordinated routine weed monitoring and inspections undertaken across Tarrawonga BMA in March, August and November/December 2025. The priority weeds identified were Coolatai Grass, Prickly Pear, Velvet Tree Pear, Sweet Briar, Noogoora Burr, Bathurst Burr, St John's Wort and Green Cestrum. The weed monitoring/inspections ensure that timely and prioritised weed control is undertaken on a seasonal basis with the information directly given to spraying contractors to identify what, where, when and how to target appropriate resources across the Tarrawonga BMA for weed control. During the reporting period, WHC implemented a weed control program of the Tarrawonga BMA including 14.5ha being treated in May and December 2025 targeting primarily broadleaf weeds within revegetation areas and along access tracks as well as Green Cestrum as required within the Willeroi West BMA. Only appropriately qualified and experienced weed contractors (AQF3 accreditation or higher for use of herbicide) were engaged to undertake weed control works for WHC.

6.4.11 Audits and Reviews

The previous Tarrawonga Independent Biodiversity Audit 2023 found no non-compliance with the BMP as the revegetation is progressing adequately towards the completion criteria and no non-compliance with the RMP but had two recommendations to improve the Mine Rehabilitation. The next TCM Independent Biodiversity Audit will be in 2026, and the completion of the Leard Forest Regional Biodiversity Strategy Stage 3 Review will occur in 2026 with the site inspection scheduled for the first half of the year. Next TCM Independent Biodiversity Audit is due by the end of September 2026.

6.4.12 Clearing

6.4.12.1 Flora

During the 2025 pre-clearing survey, a qualified ecologist tagged 25 habitat features including 14 habitat bearing trees, 8 Habitat bearing stags, 1 fallen log and 2 nests recorded within the overall area to be cleared (~12.9Ha). The ecologist was present during clearing activities in accordance with the Biodiversity Management Plan (BMP).

Tylophora linearis was also detected in the clearing supervisions, and ecologists translocated and potted approximately 3 individual stems/cuttings. Due to the low survivability rate of this species once potted, Tarrawonga has had no success keeping these translocated stems alive during the remainder

of the year in a greenhouse environment, therefore, with these individuals they were directly transplanted into selected rehabilitation.

6.4.12.2 Fauna

During the pre-clearing surveys, two fauna species were recorded in two nights of spotlighting. These were the Common Brushtail Possum (*Trichosurus vulpecula*) and audibly heard Australian Boobook (*Ninox boobook*) determined to be external to the area.

Over the duration of the clearance, all habitat features were cleared. No fauna was recorded during the clearing works.

6.4.13 Key Environmental Performance

TCM successfully registered a Conservation Agreement on 24 June 2021 over the land titles for the Tarrawonga BMA as required by the RBOS including Willeroi West Offset Area. The Conservation Agreement was secured under Part 5 Division 3 of the Biodiversity Conservation Act 2016 and thus completing the in perpetuity legal mechanism required by the Commonwealth EPBC Act Approval 2011/5923 Condition 10 and NSW Project Approval 11_0047 Schedule 3 Condition 46. Across 2025, WHC continued consultation with NPWS having previously shown interest in the Willeroi biodiversity property being transferred to National Park Estate.

6.4.14 Proposed Improvements to Environmental Management

The TCM BMP – Biodiversity Management Plan will be reviewed and submitted to the DPHI within 2026.

6.5 Aboriginal Heritage Management

6.5.1 Environmental Management Measures

During the reporting period, annual heritage inspections were completed on the 19 known heritage (Aboriginal archaeological) sites within the Tarrawonga BMA. Heritage sites are maintained with 1.8km of demarcation fencing around the heritage site perimeter and signage to mitigate access and inadvertent disturbance. During the reporting period, there were no new heritage sites identified however 6 sites were added as a result of the boundary realignment between Willeroi West and East BMAs.

The Aboriginal Heritage Conservation Strategy (AHCS) was approved by the former DPIE in November 2017 in accordance with PA 10_0138 Schedule 3 Condition 57 outlining an approach for conserving regional Aboriginal heritage values within the BTM mines and associated Biodiversity Offset Areas including assessing Cultural Values. The initial Cultural Values Surveys was acknowledged by the former DPIE on 29 June 2020 as fulfilling a number of commitments of the AHCS including endorsement by Registered Aboriginal Participants involved in the survey. Following other BOS revision and Conservation Agreement registration in 2024 within the BTM mines, the Cultural Values Surveys were completed, and a final Cultural Values Report was consulted with the Registered Aboriginal Participants and acknowledged by the DPHI on 1 September 2025 as satisfying several key commitments of the AHCS. DPHI accepted that WHC will now supersede the previous AHCS to formally document the implementation and completion of all AHCS actions and commitments including an 'On-Country' event with access and educational opportunities.

6.5.2 Key Environmental Performance

The HMP was reviewed in 2024 to conform to WHC new template and was submitted and approved by DPHI in August.

6.5.3 Proposed Improvements to Environmental Management

No specific management procedures are required.

6.6 Bushfire Management

6.6.1 Environmental Management Measures

The Tarrawonga BMA annual fuel load monitoring was undertaken between September and December 2025 as part of planning and assessment of bushfire hazard and ecological burn program for 2026; with the results indicating an overall moderate fuel loads present. During the reporting period there were no controlled ecological burns or bushfires on the Tarrawonga BMA. Other fire management implemented by WHC during the reporting period was access track maintenance carried out over 60.7km to a zero-fuel barrier standard across the Tarrawonga BMA. WHC maintains regular communications throughout the reporting period with both the Liverpool Range and Namoi-Gwydir Zone RFS teams around planning of ecological burn programs as well as maintaining contact points in case of emergency. WHC maintains a specialist firefighting contractor for an on-call engagement during the fire season to respond in the event of a bushfire on Tarrawonga BMA and non-mining lands.

6.6.2 Key Environmental Performance

No instances occurred where TCM was required to assist the RFS team or any other landholder or body.

During the 2025 reporting period, the TCM reviewed Bushfire Management Plan is awaiting tabling at the Narrabri Local Emergency Council Meetings.

6.6.3 Proposed Improvements to Environmental Management

TCM will continue to engage with the local RFS and with the community via CCC meetings and their members. TCM will continue to conduct mowing and slashing activities along access roads and tracks to keep grass at acceptable levels.

6.7 Meteorological Data

Meteorological monitoring is conducted onsite in accordance with Schedule 3 Condition 30 of the MP 11_0047. Table 6-8 summarises the monthly meteorological conditions at TCM for the 2025 reporting period.

The total annual rainfall for the reporting period was 805.2mm and the maximum monthly rainfall was recorded during March with 181mm.

A minimum temperature (10m) of -1°C was recorded in July and a maximum temperature of 38.4°C in January. Prevailing winds were predominantly Southerly throughout the entire year .

Table 6-8 - Templemore weather station monitoring data 2025

Month	2m Temperature (°C)			10m Temperature (°C)			Average Wind Speed (m/s)	Prevailing Wind Direction	Monthly Rainfall (mm)
	Min	Mean	Max	Min	Mean	Max			
January	10.2	24.6	38.6	14.4	26.1	38.4	3.18	175 (S)	50.2
February	7.9	24.3	35.4	12.8	25.9	35.9	2.62	161 (SE)	36.4
March	14.6	22.6	236.6	17.5	24.3	37	3	151 (SE)	181
April	5.08	16	27.4	9.1	18.4	28.4	2.2	141 (SE)	101
May	2.5	13	22.8	6.5	15.4	24.1	2.1	148(SE)	64.8
June	-4.3	7.3	19.6	0.2	10	20.5	1.9	170(S)	21.2
July	-4.5	8.3	20.2	-1	10.9	21	2.5	182(S)	73.8
August	-2.7	9.3	22	0	11.7	23.2	2.2	149(SE)	99.2
September	-1	12.8	28.8	3.4	15.6	29.9	2.2	162(S)	39.8
October	0.5	18.9	35.8	6.6	21.6	36.5	2.6	174(S)	38.8
November	1.2	21	37.5	8.1	23.1	37.5	2.8	183(S)	57.4
December	3.7	23.1	38.1	8.5	25.1	38.3	2.8	177(S)	41.2
Total									805.2

6.8 Waste

6.8.1 Environmental Management

During 2025, TCM continued its engagement with the contractor (Namoi Waste Corporation) that is responsible for the collection and management of the entire waste streams generated at the mine.

All waste removed from site for disposal or recycling during the reporting period is summarised in Table 6-9.

Table 6-9 - Waste management summary

Waste Stream	Container size	Unit of Measure	2025	2024	2023	2022
<i>General Waste</i>	3m ³	Kg	276,651	45,116	48,615	275,675
<i>Tyres*</i>	n/a	each	129	171	-	69
<i>Batteries**</i>	As listed	Kg/ each	1,080	4 pallets	-	84 Batteries
<i>Waste Oil</i>	IBC	L	151,600	261,700	263,800	209,700
<i>Oil Filters</i>	3m ³	Kg	7,736	13,070	7,850	9,455
<i>Hydraulic Hoses</i>	3m ³	Kg	1,383	5,340	5,900	2,410
<i>Coolant</i>	IBC	L	14,000	9,000	1000	0
<i>Grease</i>	N/A	L	-	-	-	1000
<i>RimTreat</i>	IBC	L	4,000	4,000	8000	3000
<i>Scrap Metal***</i>	15m ³	Kg	44,780	54,420	19,755	33,000
<i>Cardboard</i>	10m ³	Kg	15,015	13,005	13,620	9,485
<i>Timber</i>	15m ³	Kg	23,868	5,160	2,940	1,020
<i>Septic Waste</i>	Pumped out	L	238,500	229,500	243,300	223,158

Paper/Plastic/ Aluminium Can	240Lts	Kg	3,286	60.9	-	2,410
---	---------------	-----------	--------------	-------------	----------	--------------

Heavy machine Tyres were reused onsite for traffic management, dispose of in pit as per EPL12365 licence, or are in a storage area pending disposal; **Battery Type N200, N150 & N70 donation to Westpac helicopter; *Major clean-up of the yard; n/a not applicable or data not available; #to be able to assess performance over the years, TCM has extrapolated using values provided by the Waste contractor from August to December 2018. ## coolant is stored onsite in a 10kL tank that is emptied by the waste contractor before it reaches 100% capacity*

In November 2024=5, TCM disposed of 129 OTR tyres that had been historically stockpiled on site. TCM disposed of these in pit in accordance with EPL 12365.

86.5kg of archived documents were also shredded through the contractor during the reporting period.

6.8.2 Key Environmental Performance

During the reporting period no incidents relating to waste management occurred.

Tarrawonga continued its on-site bottle and can recycling program, partnering with the Boggabri Lions Club to transport materials to local Return and Earn facilities. A total of 3,286 containers were recycled during the reporting period, with all proceeds donated directly to the Boggabri Hospital Auxiliary. This initiative will continue into the next reporting period.

6.8.3 Proposed Improvements to Environmental Management

Tarrawonga continually aims to reduce waste via continual improvement of initiatives including recycling (oils, greases, scrap steel and domestic recyclables) and increasing tyre life through education and training of machine operators.

6.9 Environmental Performance Summary

An environmental performance summary for TCM is presented in Table 6-10:

Table 6-10 - Environmental Performance

Aspect	Approval Criteria or EIS/EA Prediction	Performance during the reporting period	Trend / Key Management Implications	Implemented / proposed management actions
Noise	Refer s6.1	Approval criteria met.	Nil	Nil
Blast	Refer s6.2	Approval criteria met.	Nil	Nil
Air Quality	Refer s6.3	Approval criteria met.	Nil	Nil
Biodiversity	Refer s6.4	Approval criteria met.	Nil	Nil
Heritage	Refer s6.5; s6.6	Approval criteria met.	Nil	Nil
Spontaneous Combustion	Refer s6.7	Approval criteria met.	Nil	Nil
Bushfire Management	Refer s6.8	Approval criteria met.	Nil	Nil
Waste Management	Refer s6.10	Approval criteria met	Nil	Nil
Water management	Refer s7	Approval criteria met	Nil	Nil

7 WATER MANAGEMENT

The mine lies within the catchment of the Namoi River. Locally and within proximity of the project site, Goonbri Creek, Bollol Creek and Nagero Creek all provide flows to the Namoi River during runoff events. The design of sediment basins within the disturbed area of the mine aims to limit the opportunity of discharge of runoff from mine-disturbed area, i.e. after appropriate detention time to satisfy licensed discharge criteria.

Detailed Surface Water and Groundwater monitoring results are provided in Appendix 3 and Appendix 4 respectively.

7.1 Surface Water Performance and Management

Sediment basins, storage dams and associated banks and drains have been designed by an engineering consultant in accordance with the Managing Urban Stormwater: Soils and Construction Vol 2E Mines and Quarries (DECC, 2008) in conjunction with the references to Volume 1 (Landcom, 2004). Water within the Project Approval area is nominally classified either as “clean”, “dirty”, “contaminated” or “pit water” depending on the source of the flow and it’s potential for physical or chemical contamination. The definition of these classifications follows:

- “Clean Water” comprises water that has not come in contact with mine disturbance and does not have potential to contain hydrocarbons.
- “Dirty Water” comprises water that has come into contact with mine disturbance and does not have potential to contain hydrocarbons.
- “Pit Water” comprises water contained within the open cut sump or pumped to the void water dam for containment and use for dust suppression across the site.
- “Contaminated Water” comprises runoff water, which could potentially contain hydrocarbons.

There are five wet weather discharge points nominated in the current EPL12365 (relevant to MP 11_0047 Schedule 3 Conditions 33 and 39). These are SD9 (LDP2), SD28 (LDP3), SD17 (LDP1), SB23B (LDP26) and SB24B (LDP27).

7.1.1 Surface Water Monitoring

TCM has a requirement to undertake surface water monitoring on a quarterly basis in addition to the monitoring of any wet weather discharge event. Historical data is available in Appendix 3. Surface water monitoring locations are shown in Appendix 3.

Whilst there are no criteria or concentration limits specified for the quarterly surface water samples, the results do provide an indication as to the quality of water on-site. The assessment of sediment load, salinity, pH, oil and grease and other monitoring parameters during these quarterly water monitoring events was consistent with previous reporting years and summarised in Appendix 3.

In summary, levels of oil and grease were low overall, with levels below the discharge limits. Level of Total Suspended Solids (TSS) fluctuated between 10 and 1,040 mg/L with approximately 50% of the measurements below the 50mg/L.

Overall pH values showed that water samples were alkaline. Concentration levels of antimony, arsenic, molybdenum and selenium were monitored throughout the period. Results remained consistently low and below thresholds outlined in the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZECC, 2000).

Surface water monitoring results showed generally similar trends with previous reporting periods.

Commitments with regard to the surface water-monitoring program are detailed in the Water Management Plan which was approved in September 2023.

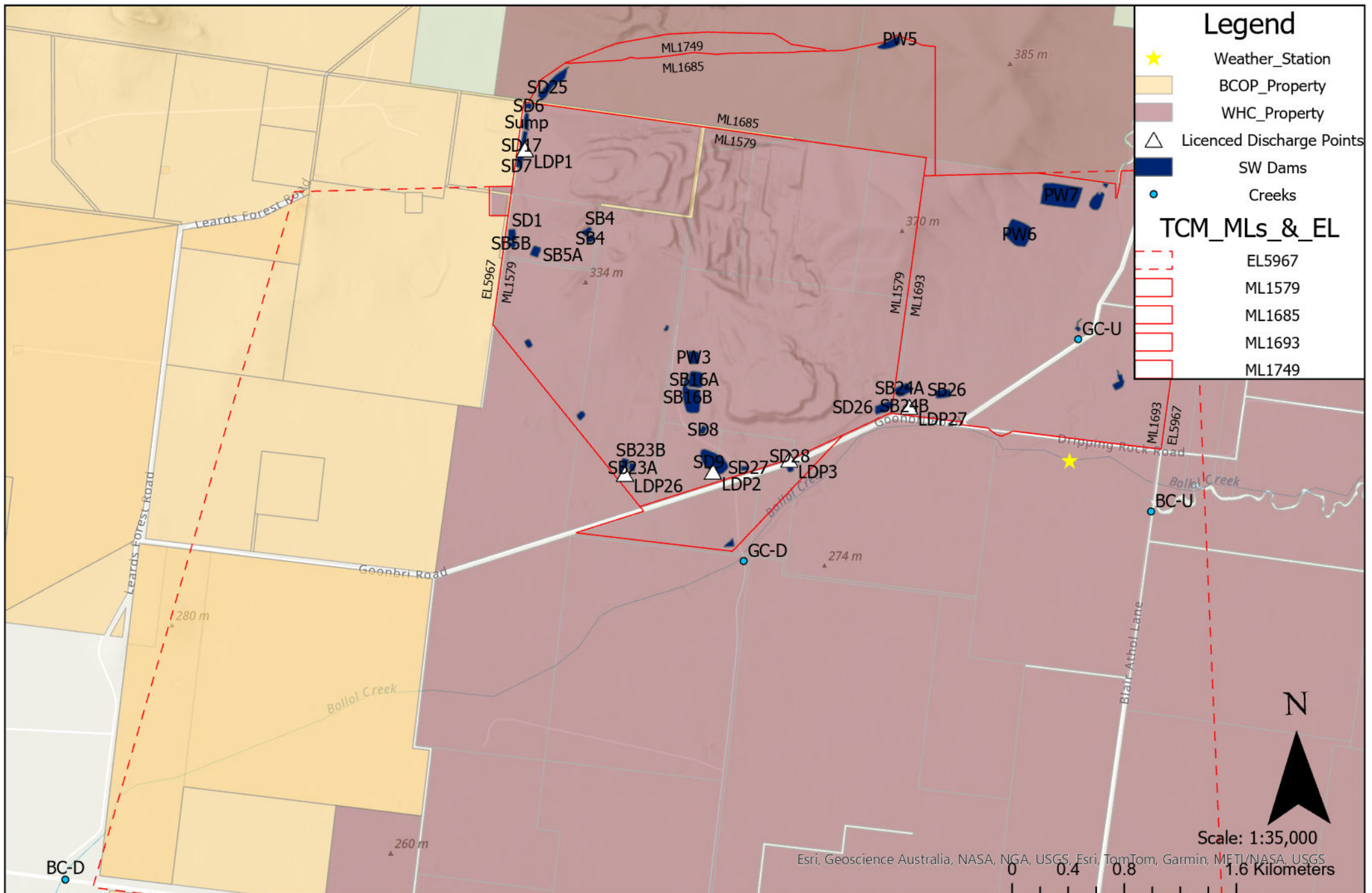
7.1.2 Water Discharges

Throughout the 2025 reporting period, there was 7 wet weather discharges release from 4 separate LDP's.

In accordance with relevant EPL12365 conditions, water samples were collected after discharge and results can be found in Appendix 3.

Table 7-1 - Discharge Results 2024

LDP #	No. of discharges	pH		EC (uS/cm)		TSS (mg/L)		Oil and Grease (mg/L)	
		Mean	Max/only	Mean	Max/only	Mean	Max/only	Mean	Max/only
LDP1	1	-	7.3	-	385	-	73	-	<5
LDP2	0	-	-	-	-	-	-	-	-
LDP3	1	-	6.6	-	147	-	124	-	<5
LDP26	2	6.8	-	129	-	126	-	<5	-
LDP27	3	7.2	-	195	-	884	-	<5	-



7.2 Groundwater Management

7.2.1 Environmental Performance and Management

The mine's performance with respect to groundwater performance and management, the prevention of pollution, and the assessment of impacts on groundwater availability to other surrounding users, has been assessed through groundwater level and chemistry monitoring undertaken at a series of piezometers and bores within the Project Area and adjacent properties.

7.2.2 Groundwater Monitoring

Groundwater monitoring was undertaken by a contracted company, accountable for water level measurement, collection of samples and laboratory analysis. Two data loggers monitored water levels at MW1 and MW2 to the South and one Vibrating Wire Piezometers (VWP) sites (TA65) was operating to the East of the mine.

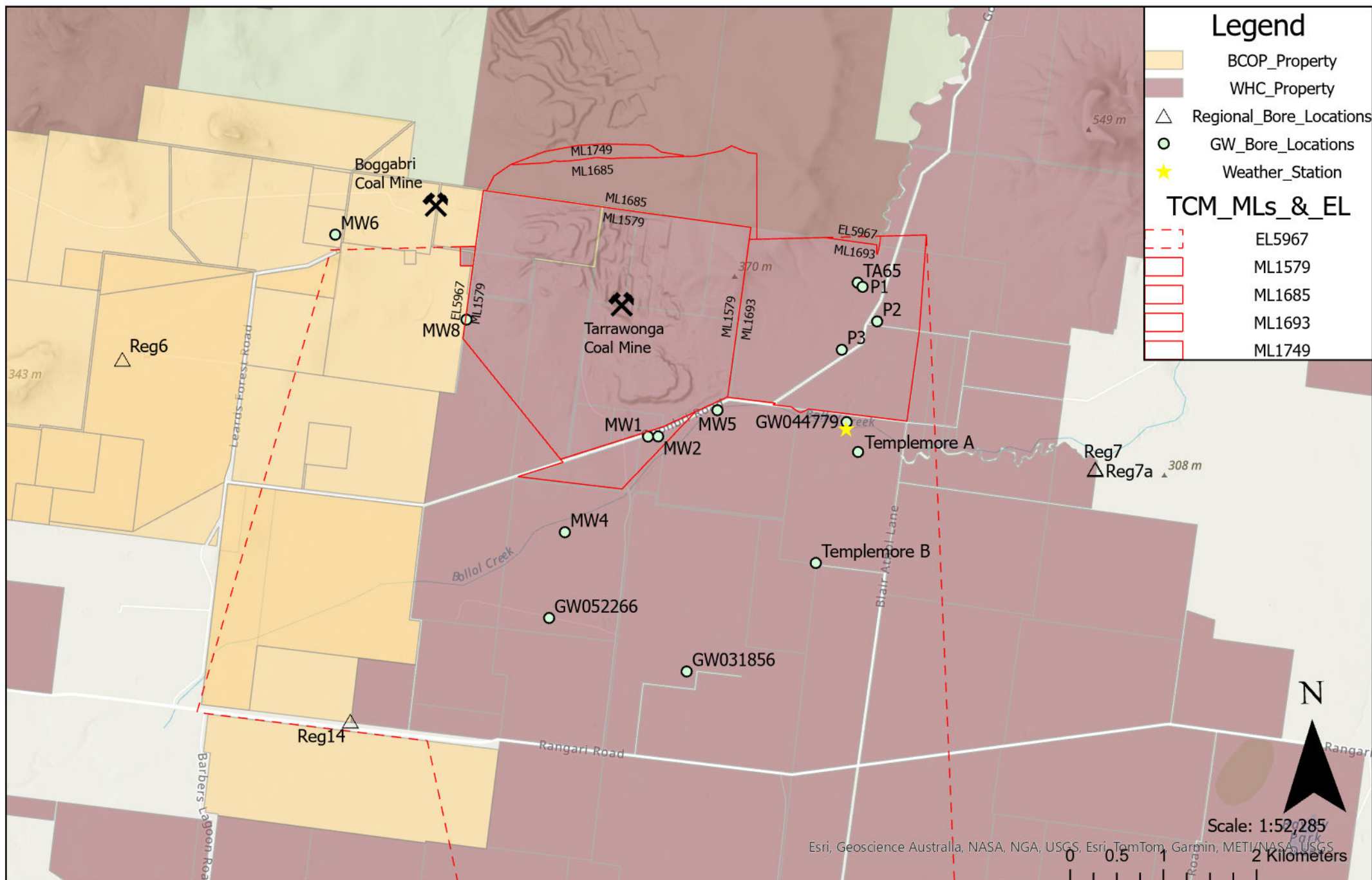
The groundwater monitoring sites are shown in Figure 10. Historical groundwater quality data and standing water level plots are available in Appendix 4.

During 2023, three new alluvium bores were installed on the eastern side of the mining lease. These had groundwater loggers installed. These bores were installed and tested and will continue to be monitored within TCM's monitoring program.

Groundwater levels

Graphs available in Appendix 4 show that groundwater levels at the majority of nominated monitoring bores maintained a steady trend throughout the reporting period. Most of the bore levels show a significant increase at the beginning of 2020, likely related to rainfall recorded over that year. Sampling and water levels have not been monitored at MW6 since the beginning of 2019, due to a broken casing as well as this bore being located on Boggabri Coal Mine property. Samples could not be collected at MW8 due to a damaged casing however, water level could regularly be checked at that site.

Depressurisation continues to be observed in the 97m, 136m and 153m intakes from approximately March 2017. During 2025 depressurisation remained relatively stable in the 30m, 35m, 47m and 56m, ranging from 0.29m in the 30m intake to -0.04m in the 56m intake. During 2024, a significant depressurisation of some 26.72m was recorded in the 110m intake, however in 2025 it appears that some recharge has occurred and the water may once again be above the intake with an annual change of 5.67m. The deeper sensors are modelled in the BTM Groundwater Model to be below the deepest seams that are being mined. As TCM has now mined the deepest Nagero seam, this is to be expected.



Groundwater quality

Analysis of samples taken during the reporting period showed that groundwater quality remained generally in line with historical data at all locations monitored. Water quality was compared to the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZECC, 2000) guidelines for stock watering (cattle). There were no recorded instances of groundwater quality exceeding the limits prescribed by those guidelines during the reporting period.

Water quality has also been compared to the National Environment Protection Council (NEPC) Agricultural and Livestock Guidelines. The following instances occurred where water quality did not meet the parameters identified in the guidelines:

- Since there are no Iron limits for livestock in the ANZECC, the agricultural irrigation guidelines for iron (0.2mg/L) was used for comparison. Majority of the monitoring sites were above the 0.2mg/l limit on at least one occasion during the reporting period. Throughout historical data (back to 2009), iron has been seen to fluctuate with high peaks (up to 47mg/L) at most bores on more than one occasion.
- All bores except for GW052266 were above the NEPC agricultural irrigation guideline for TDS (600mg/L) when sampled throughout 2025. No site measured above the NEPC livestock guideline limit (~ 3,500mg/L). No sites measured above the ANZECC guideline for stock drinking water (4,000mg/L) value.

7.2.3 Groundwater Management

Pit water inflow is a result of combination of rainfall and groundwater seepage:

- Direct rainfall runoff and infiltration through the emplaced overburden which flows down-dip to the open cut sump(s); and
- Inflows from the exposed coal seam.

To prevent any potential risk of contamination with chemical and hydrocarbon, TCM implemented control measures such as:

- Vehicle maintenance carried out in designated areas.
- Any spills being cleaned up; and
- Hydrocarbon products being stored within a bunded area, constructed in accordance with AS 1940-2004 and/or EPA requirements.

Monitoring occurs in surrounding groundwater bores on a regular basis to detect and assess any changes in quality or level that may be mine attributed.

The Tarrawonga Coal Project EA identified that there would be a reduction in the potentiometric head in the aquifers of the porous rock systems to the east and the north. In the past, the Vibrating Wire Piezometers installed in TA60 and TA65 have demonstrated depressurisation as predicted as the mine moves toward the east. Due to pit progression, site TA60 was decommissioned in 2019.

Regional Bores (Reg. 6, 7a and 14) maintained a steady trend during the period for all parameters including Electrical conductivity (EC). EC was compared to the performance indicators outlined in TCM's Groundwater Response Plan within the WMP, and none of these bores were above performance indicators (the 95th percentile of historical data) at the time of this report. Water levels at each of the regional bores maintained steady levels, and therefore none were below performance indicators (5th percentile of historical data) during the reporting period.

The BTM Complex had a revised BTM Ground Water model and submitted and approved by DPE during the 2025 reporting period as part of the Maules Creek Coal Continuation project. This model was prepared in consultation with groundwater experts and regulatory agencies. The revised ground water model provides a revised prediction for the passive take of the approved Tarrawonga mining operations over time. Tarrawonga Mine will continue to acquire additional water access licenses as required over time and relative to the predicted passive groundwater take volume for any given year.

During the reporting period, no complaints have been received in relation to impacts upon any other groundwater users. This is consistent with the predictions of the EA; that no significant impact would therefore affect beneficial use of groundwater of other groundwater users.

7.2.4 Water Take

During the water year 2025, no water was extracted from the licenced groundwater bores. Instead, TCM used rainfall and runoff captured in the sediment dams and pit to provide operational water requirements. Any water in the pit occurred through passive take and is in accordance with Water licences as listed in Table 7-2 that give units of entitlement per water annum.

In accordance with respective sites approvals and principles of the BTM Water Management Strategy, water sharing opportunities were discussed.

Table 7-2 - Water Take

Passive Take Licenses						
Water Licence #	Water Sharing Plan	Water Source and Management Zone	Share Units (ML)	Available Water (ML)	Passive Take ¹ (ML)	Usage (ML)
WAL2716	Namoi Alluvial Groundwater Sources 2020	Upper Namoi Zone 4 Namoi Valley (Keepit Dam to Gin's Leap) Groundwater Source	43	86	91	64
WAL6548			18 ²	36 ²		27
WAL12479		Upper Namoi Zone 11 Maules Creek Groundwater Source	39 ²	78 ²	4	4
WAL29548	NSW Murray Darling Basin Porous Rock Groundwater Sources 2020	Gunnedah - Oxley Basin Mdb Groundwater Source	50	62.5	483	58
WAL31084			250	312.5		288
WAL29461			120	150		138

1 – The Boggabri-Tarrawonga-Maules Creek (BTM) Complex groundwater assessment of passive take volumes was updated in 2025. Additional water licences are in the process of being obtained by WHC, as required, to ensure compliance with future versions of the Water Management Plan which will be updated to include these updated passives take volumes.

2 – Tarrawonga Share. Available water shared 50:50 with Maules Creek Coal Mine. This licensing is also in the process of being reviewed as part of the wider licensing review associated with the updated BTM Complex Groundwater Model.

7.3 Site Water Balance

According to the site water balance developed by a water consultant, the water management system for 2025 had the capacity to be operated and meet operational objectives in normal average weather conditions;

- Wet weather releases and controlled water releases occurred on two occasions throughout August of 2025. This allowed excess water release from site, and this is discussed in Section 7.1;
- Rainfall and runoff captured in the sediment and pit water dams provided for the majority of water demand in the dry, median and wet years;

These predictions were consistent with the actual outcomes observed during this monitoring period.

Table 7-3 provides an overview of water stored and used on site during the reporting period.

Table 7-3 - Water Stored and used during the reporting period

	Table 2-3 EA values (2012) (ML)							W e t Y e a r - 7 5 % i l e (1 7 y e a r s)
	Jan 2025 – Dec 2025 (ML)	Jan 2024 – Dec 2024 (ML)	Jan 2023 – Dec 2023 (ML)	Jan 2022 – Dec 2022 (ML)	Jan 2021 – Dec 2021 (ML)	Dry Year- 25%-ile (17 years)	Average Year (17 years)	
Total Runoff	1214	535	488	1,983	2,273	325	402	4 8 0
Groundw ater inflow	74	67	61	62	58	255	255	2 5 5
External Source	0	0	0	0	0	n/a	n/a	n / a
TOTAL INPUT	1,288	602	549	2,045	2,544	580	657	7 3 5
Evaporati on (from storages)	216	174	208	284	241	118	130	1 4 1
Evaporat or fans	-	-	55	-	-	-	-	-
Crusher Dust suppressi on	29	36	57	35	35	8	8	8

Haul Road and ROM pad dust suppression	407	496	658	374	378	389	394	399
Offsite release/dischARGE	146	12	32	423	146	0	0	0
Water contained in spoil/Other	237	n/a	n/a	2 (Vehicle Washdown)	900 (Water Contained in Spoil)	n/a	n/a	n/a
TOTAL OUTPUT	826	718	1010	1,118	1,914	515	532	548
Change in inventory	463	-116	-460	927	630	64	125	193

Note: For Jan-Dec (annual) period, values must be compared with caution as the EA value is based on 17-year annual average with changing catchment and land uses over time.

8 REHABILITATION

8.1 Post Rehabilitation Land Uses

According to the Mine Site Rehabilitation Management Plan and the rehabilitation Management Plan, woodland areas will be established on slopes and upper terraces of the Northern and Southern Emplacement Areas.

Rehabilitation on the Southern Emplacement is still immature while it is further advanced on the Northern Emplacement (including in ML1685 adjacent to Boggabri Coal Mine) with some older sections close to achieving open woodland land use target. However, no rehabilitation to Box Gum Endangered Ecological Community (EEC) woodland was undertaken nor has rehabilitation to agricultural land occurred during the reporting period.

8.2 Rehabilitation Performance during the Reporting Period

8.2.1 Status of Mining and Rehabilitation

Integration with Boggabri Coal's waste emplacement has started with rehabilitation activities to follow as per the FWP and RMP. The EA Total disturbance Area generally aligns with the most recent total disturbance Areas.

At the close of 2025, Tarrawonga achieved 22.7ha of ecosystem establishment, and 30.4ha of landform prepared for rehabilitation during the upcoming 2026 calander year.

The status of mining and rehabilitation at the completion of the reporting period is summarised in Table 8-1 and **Error! Reference source not found..**

Table 8-1- Rehabilitation Status

Mine Area Type 1 [Ha]	2018	2019	2020	2021	2022	2023	2024	2025
0 Total Mine Footprint	627.6	687.5	741.8	772.2	786.3	828.4	852.73	849.23
1 Total Active Disturbance	540.7	579.4	607.8	625.6	607.6	638.6	790.64	566.92
2 Land Being Prepared for Rehabilitation	12.9	29.6	27.6	11.7	26.2	26.1	30.1	34.46
3 Land Under Active Rehabilitation	74.1	78.5	106.4	146.7	152.4	194.4	226.4	247.86
4 Completed Rehabilitation	0.0	0.0	0.0	0.0	0	0	0	0

¹ Refer Annual Review Guideline (p.11) for description of mine area types.

*Forecast for 2022 based on MOPG. All numbers in years beyond 2022 are as per the Annual Rehabilitation Report and Forward Plans.

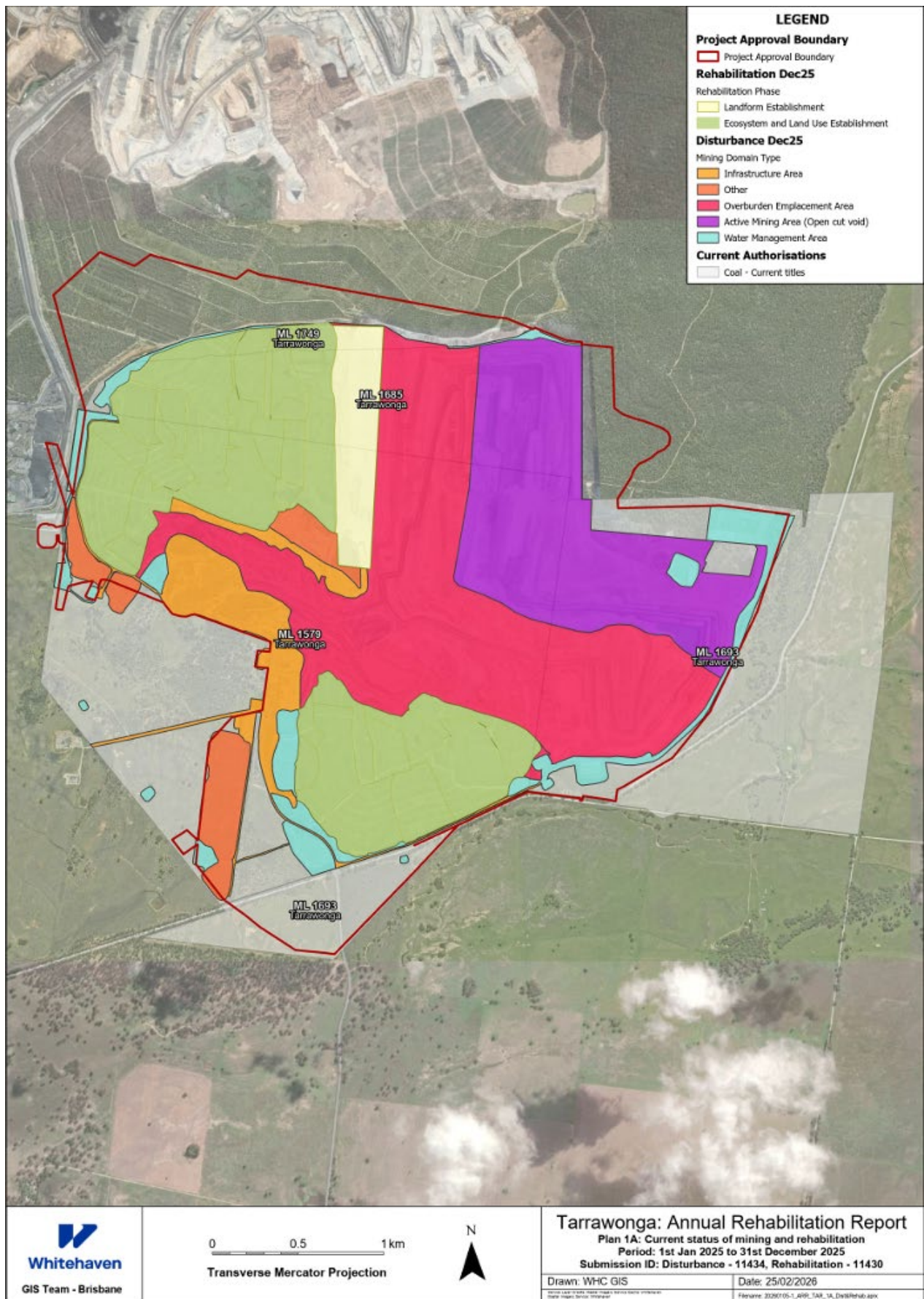


Figure 11 - Tarrawonga Rehabilitation status as of December 2025

8.2.2 Rehabilitation Fauna and Flora Monitoring

Investigations undertaken by Geoff Cunningham Natural Resource Consultants Pty Ltd as part of the original Mine EIS identified no significant impact on threatened flora species, endangered ecological communities, endangered flora populations or critical habitat as a consequence of the development. Establishment of monitoring plots commenced in April 2007 and has continued as required. Over the life of the mine, quadrats are to be established across rehabilitation sites and control sites. Potential impacts noted in the EA included the clearing of Box-Gum Woodland EEC/CEEC and the groundwater dependent ecosystem - Bracteates Honey myrtle low riparian forest. However, these areas had not yet been disturbed or cleared for mining purposes.

The annual flora and fauna monitoring program has been developed progressively over the life of the project and is now a finalised methodology for WHC Gunnedah Open Cut sites. This is now known as the Annual Rehabilitation Monitoring Method (ARMM: Aspect Ecology, 2024). Qualified ecologists completed the 2025 annual monitoring program in accordance with the above mentioned ARMM, which was compiled in accordance with the Rehabilitation Management Plan, the Mine Site Rehabilitation Management Plan, the Biodiversity Management Plan and the recommendations from previous reports.

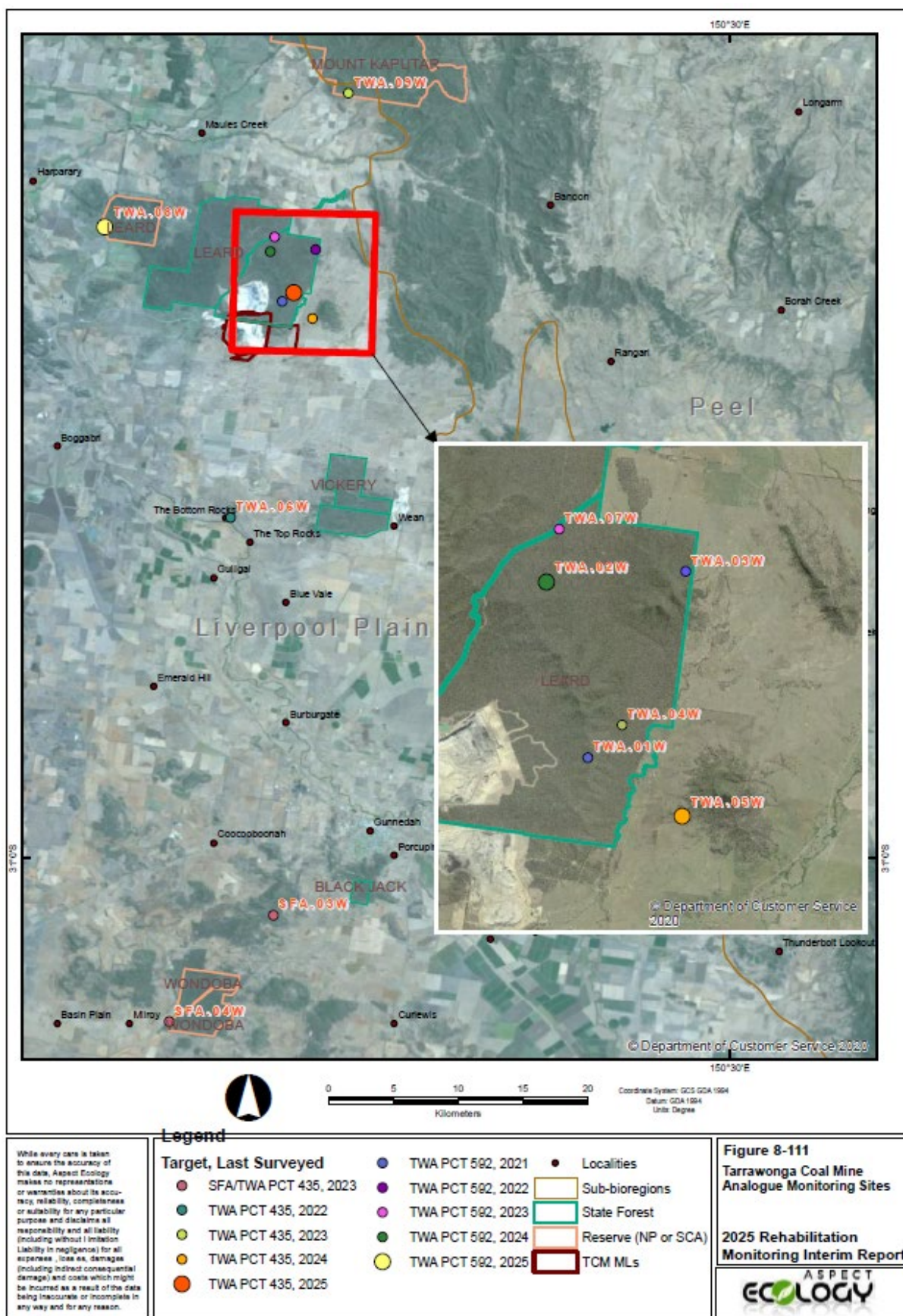


Figure 12 - Analogue site locations – Rehabilitation monitoring 2025

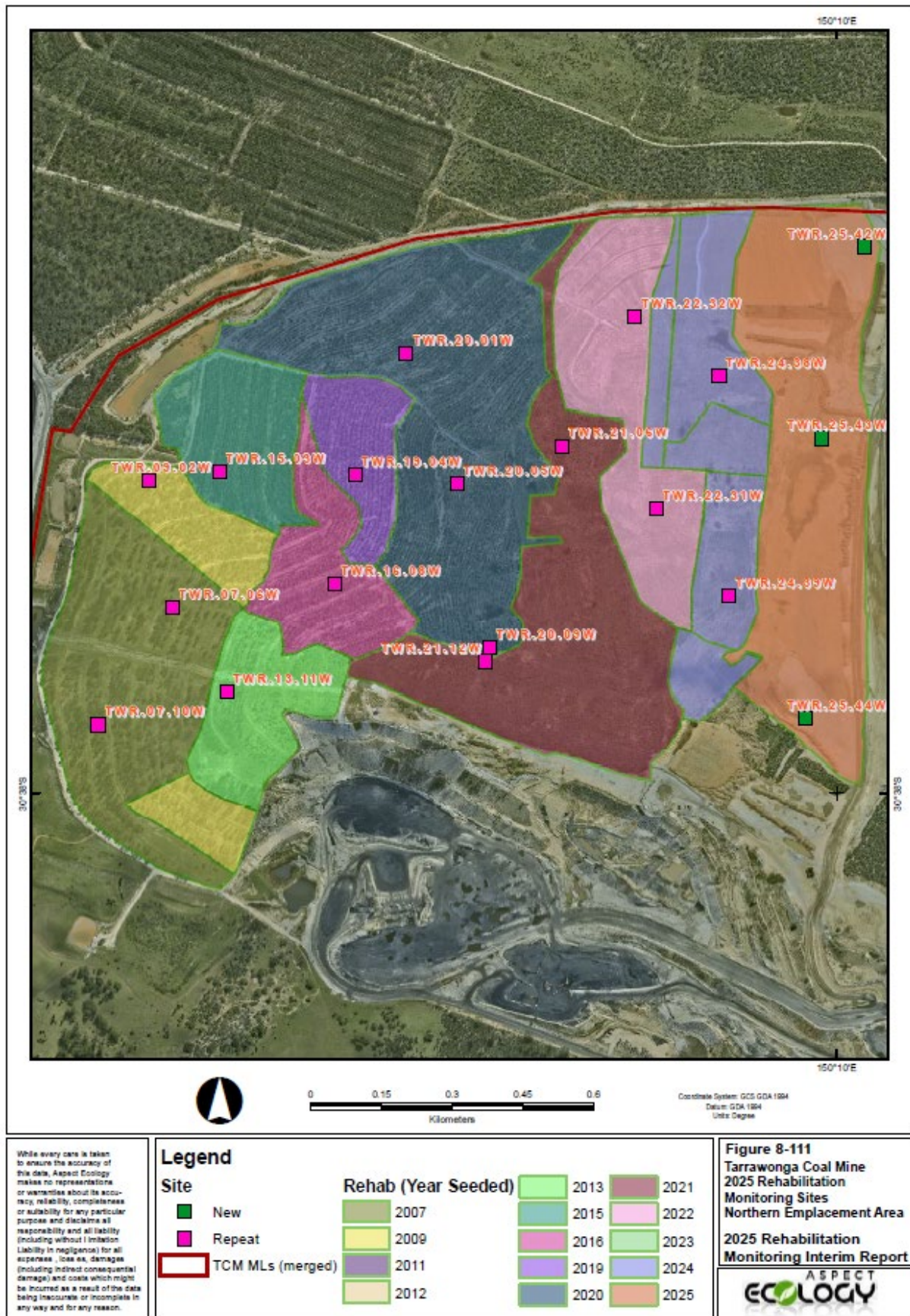


Figure 13 - Monitoring locations Northern Rehabilitation – Rehabilitation Monitoring 2025

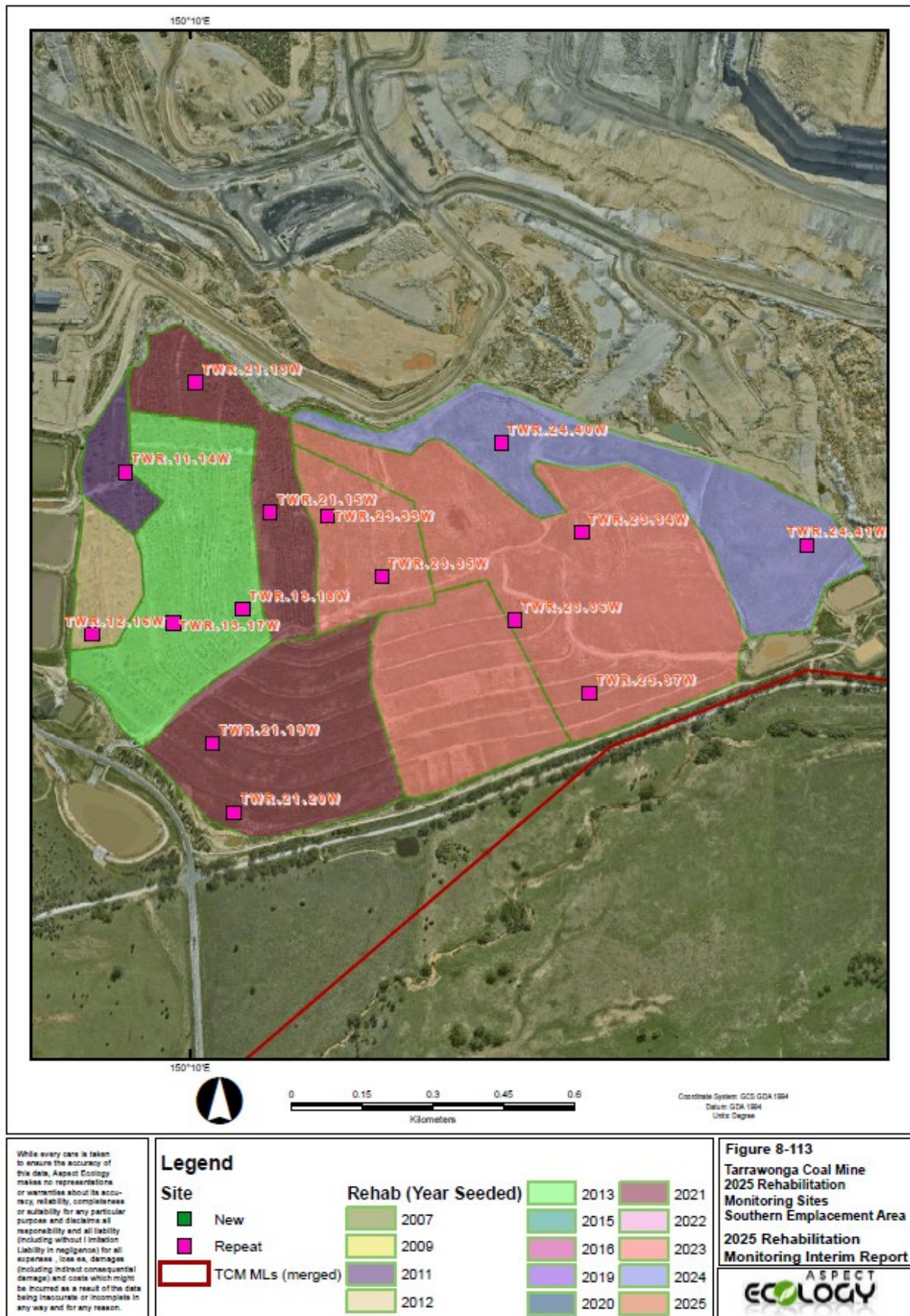


Figure 14 - Monitoring Locations Southern Rehabilitation - Rehabilitation Monitoring 2025

8.2.2.1 Flora Monitoring

A detailed ecological field assessment of rehabilitated areas and analogue sites was undertaken during September - October 2025. Monitoring was undertaken using the ARMM. Monitoring comprised:

- thirty repeat monitoring woodland rehabilitation sites;
- three newly established woodland rehabilitation sites;
- two repeat monitoring analogue woodland sites; and,
- twenty-nine categorical point assessments at notable locations within the Woodland rehabilitation.

Groundcover

Surface Cover

Surface cover, which includes vegetation, mulch, and litter, improved by 10.3% in 2025. The 2011 rehabilitation area has maintained strong surface cover for five years, consistently meeting targets. The 2021 rehabilitation has maintained its benchmark for a second year. The 2013 during 2025 has returned to meeting benchmark from its declined slightly in 2024. The 2022 area demonstrated significant progress. Conversely, the 2015 area fell below the benchmark in 2025 after achieving it in 2024, and the 2016 area showed a decline. The remaining areas, including those established in 2007, 2009, 2012, 2020 and 2024, have yet to achieve the benchmark despite some showing gradual improvement over time.

Native Vegetation Groundcover

Overall, native groundcover decreased slightly in 2025 by 0.01%. The 2020 sites is very close to meeting targets. Further, 2012 substantially increased in 2025 from its 2024 levels. 2022, 2023 and 2024 areas continue to trend upwards but are below benchmark. The remaining areas saw minimal change or decline compared to 2024 values.

Native Grass Cover

The 2020 rehabilitation area was close to meeting its grass cover target. The four sites were above 10% with the remaining eight having less than 10% grass cover, which is significantly below target.

Mid-Storey

2016 was the only site to meet the target for mid-storey vegetation (shrubs and small trees) with 2012 coming in very close to meeting the target. However, sites from 2015, 2019, 2020 and 2021 showed gradual improvement with these areas potentially meet targets in the coming years if the trend continues. All other areas remain below the benchmark.

Overstorey

The 2007 and 2009 sites met their required tree cover levels, while the 2013 site was slightly below target. The 2011 and 2012 Areas had no overstorey cover, indicating that tree growth has been poor in these areas.

Richness

Native Species Richness

Most rehabilitation areas had an increase in native species diversity in 2025. The 2011 and 2013 areas remained below target, but 2021 areas had a substantial increase. Further, 2024 saw a significant improvement from 2024 monitoring. The 2016, 2019 and 2020 areas had higher-than-expected species diversity, suggesting good progress in those locations. 2007 saw a slight decrease below benchmark after meeting it in 2024.

Native Shrub Species Richness

Eight out of thirteen rehabilitation areas met their targets for shrub diversity in 2025. 2024 area very close to reaching target benchmark.

Native Tree Species Richness

Only three out of twelve areas met their targets for tree species variety in 2025. Four areas exhibit excess tree species richness compared to the natural benchmark.

Density

Native Shrub Density

Seven of the 8 applicable areas have met completion criteria in 2025. However, older areas now outside of the Ecosystem Development Phase did exhibit lower-than-expected shrub density.

Native Tree Density

Three of six applicable areas met target in 2025 with 2019 nearing the target. On average there was a slight decrease in density with variable trends with some areas declining where others were stabilising or increasing.

Species Composition

Some important native species that should be present were still missing from rehabilitation areas. Key species like *Callitris glaucophylla* (White Cypress Pine) were mostly absent.

Weed Presence

Weed levels increased in all rehabilitation areas in 2025 with no sites meeting the target for weed presence. The 2009, 2015 and 2016 sites had the least weed presence, while the 2011 and 2012 site had the highest level of weed invasion.

It was recommended that:

- A focus of stronger weed control efforts, especially in the 2011 and 2012 areas where weed presence is greatest.
- Increasing native ground cover could help improve overall rehabilitation success seeding after weed control efforts undertaken.

Additional planting of key missing species like *Callitris glaucophylla* should be considered notably after weed control efforts undertaken.

Soil pits

Soil profile and condition assessments were recommended every three years. Two soil pits were established in 2011, one in the rehabilitation zone, and one in each control zone. Soil pits are described

using standard field measures with particular notice of horizon boundaries and ecological functionality (e.g. root establishment, evidence of soil fauna). Soil pits are analysed every three years. As soil pits were analysed in 2018, this parameter was due in the 2021 reporting period. Due to outward impacts such as flooding and overall site access issues due to saturated ground, soil pits were unable to be dug in 2022 but done during 2023.

In the summer 2023 survey, the soil pit in the rehabilitation zone (Rehabilitation Zone 2) showed a profile reconstruction with topsoil depth at 15 cm and depth to overburden at 30 cm. The control zone showed a similar profile reconstruction with topsoil depth at 10 cm and depth to compact clays at 30 cm. The rehabilitation zone exhibited good establishment of grass. The control zone also showed good establishment of grass and other plant roots including larger tree roots, which were present in all horizons. Soil fauna was not identified in any pits.

An extensive soil testing program was conducted in 2020 to obtain representative soil samples within each rehabilitation area. This program is discussed further in section 8.2.3.2. Another such program is planned for 2025 and will explore locations within the rehabilitation which is displaying low growth records for the PCT type, and areas with erosion that requires maintenance. This program will support and feed a potential maintenance infill planting or seeding program within the rehabilitation.

Revegetation Management

Topsoil throughout all rehabilitated areas was mixed with mulch from previous tree clearing campaigns, spread in 200 to 300mm layers and ameliorated with gypsum and manure. The topsoil was then seeded with cover crop (oats) and native seed mix consisting of (but not limited to) the following species: *Eucalyptus albens*, *Eucalyptus Mellidora*, *Eucalyptus crebra* *Acacia buxifolia*, *Acacia paradoxa*, *Geijera parviflora*, *Indigofera adesmiifolia*, *Indigofera australis*, *Clematis spp.*, *Desmodium spp.*, *Dianella revoluta*, *Vittadinia spp.*, *Austrodanthonia spp.*, *Austrostipa aristiglumis*, and *Digitaria spp.* A large-scale tree planting program occurred throughout 2025. This consisted of planting more than 16,000 trees.

8.2.2.2 Fauna Monitoring

Fauna habitat broadly consisted of stag trees, rocks of mixed size, coarse woody debris, emerging tree canopies, and pondage areas, yet some sites had minimal habitat features. Native fauna observations included a variety of birds, including wrens and ravens, and skinks. Macropod scats were present at several sites. Feral pigs and goats were also observed.

Woodland birds monitoring was undertaken during Winter 2025 and Spring 2025. Birds were recorded whilst walking in a meandering path in the area surrounding each monitoring point, with all birds recorded either through direct observation or calls. Monitoring sites were surveyed for 20 minutes by one observer, once in the morning and again in the afternoon to cover peak activity hours for bird species.

Winter Bird Survey

A total of 33 bird species were recorded during the 2025 winter monitoring surveys, including one threatened species, the Speckled Warbler, observed at a rehabilitation sites R02 and R03. Species richness increased across all sites since 2023, with rehabilitation site R01 recording the highest richness (16 species). Notably, rehabilitation sites recorded higher species richness than control sites for the third consecutive year, indicating progress toward resembling established woodland habitats. The proportion of woodland species increased to 97% in 2025 compared to the 89% in 2024, 77% in 2023 and 67% in 2022. However, the presence of Noisy Miners at site R01 may impact bird diversity and requires monitoring.

Spring Bird Survey

A total of 36 bird species were recorded during the 2025 spring monitoring surveys, including two threatened species: Speckled Warbler and Grey-crowned Babbler. The average species richness for the five survey sites in 2024 was 13 species, consistent with recent years but lower than in 2021/2022. Control site C06 recorded the highest richness (18 species), while C05 had the lowest (11 species). All three rehabilitation sites either were consistent or saw an increased species richness from 2024, suggesting habitat stability and improvement. However, the presence of Noisy Miners at sites R01 and R02 may impact diversity and requires monitoring.

AUSRIVAS Micro and Macro invertebrate monitoring

During the 2025 reporting period, TCM conducted its second AUSRIVAS monitoring program. This assessed water quality, macroinvertebrate community, and riparian vegetation condition across multiple sites in autumn and spring. Only 2 control sites were unable to be sampled which was an improvement from 2024. Water quality results indicated that turbidity exceeded ANZECC guidelines at one upstream site and two downstream sites, and dissolved oxygen levels varied with many below ANZECC guidelines, likely influenced by natural drying patterns and historical land use rather than direct mining impacts. Macroinvertebrate diversity continued to be low with control locations having lower diversity still containing communities dominated by tolerant species, which is expected in ephemeral waterways. Riparian vegetation was moderate health, with only one downstream location being at poor health. However vegetation health was lower than in 2024 which is likely due to recent flooding and drying within 2025 in combination with existing impacts from historical agricultural practices. It was determined that there was no indication of TCM directly impacting control locations and stable flows in creeks. Through the continued assessment, it is still recommended that even with more sites containing water during 2025 that the ephemeral nature will continue to provide challenges for monitoring and will impact scores as stable conditions are required to see increased improvements in stream and riparian health.

8.2.3 Habitat Management

During the Ecosystem Establishment phase, cover crop was sown during the seeding process to establish vegetation cover, weed suppression and erosion control while native species germinate.

8.2.3.1 Weeds Management

Management of targeted weed species within the mine leases was undertaken at opportune times following suitable weather and with consideration to the NIWAC Weed Management Guide for North West NSW (NSW DPI).

During 2025, a weed monitoring program was conducted at TCM by site personnel. These inspections noted an increase in Broadleaf weeds on the Southern OEA due to continuation of favourable conditions from previous years. This resulted in targeted spraying program in September of Charlie Weed, Paterson's curse, cotton bush, mustard weed and saffron thistle.

Topsoil and Subsoil stockpiles are periodically sprayed for weeds, with prickly pear being a priority target. Additionally, where applicable, topsoil stockpiles are slashed to manage and suppress weeds with this conducted in the western topsoil stockpiles during August.

Slashing works were also undertaken in the Winter period, to reduce the weed load and increase native grasses on the outside of the active pit and rehabilitation. This also aids in bushfire management practices. Regular slashing and weed spraying of general weeds occurred on the entrance road to the mine and around administration, maintenance and ROM areas.

8.2.3.2 Feral Animal Management

TCM coordinated the implementation of the Vertebrate Pest Management Plan using infra-red motion cameras installed at strategic locations around the Mining Leases. Findings indicate overall vertebrate pest sighting onsite has significantly dropped since 2018.

The survey for 2025 (Table 8-2) showed there were no sightings of goats, cats, dogs or hares/rabbits.

Feral pig sightings continued to decrease from 159 in 2018 to 13 total sightings for this reporting period. In response to any increase in sightings of feral pigs by site personnel, a baiting program was conducted within the Mining Lease in 2025 using Hoggone bait by a licenced contractor. This resulted in more than 10 pigs being removed. TCM will continue to monitor and manage feral animals according to the BMP and MSRMP.

Table 8-2 - Summary of Vertebrate Pest Sighting (2018 - 2025)

	Feral Pig (Descendant of various breeds of <i>Sus scrofa</i>)	Fox (<i>Vulpes vulpes</i>)	Feral Cat (<i>Felis catus</i>)	Rabbit/Hare (<i>Oryctolagus cuniculus</i>) / (<i>Lepus capensis</i>)	Wild Dog (<i>Canis familiaris</i>)	Other
Quarter 1	13	1	0	0	0	0
Quarter 2	0	0	0	0	0	0
Quarter 3	0	0	0	0	0	0
Quarter 4	0	0	0	0	0	0
Total 2025	13	1	0	0	0	0
Total 2024	9	0	0	0	0	0
Total 2023	8	0	0	1	0	1
Total 2022	34	2	0	1	0	2
Total 2021	6	1	0	1	0	0
Total 2020	17	4	0	22	0	0
Total 2019	54	73	2	140	0	2
Total 2018	159	168	1	163	0	2

8.2.3.3 Soil & Erosion Management

During 2025, efforts were made to improve soil management and minimise erosion on site via active erosion repair works being undertaken on the southern rehab areas during the low rainfall winter period. This repair works was observed to be revegetated prior to the summer storm period and has to date not suffered any further erosion within these locations.

Soil Management

A soil specialist conducted an extensive soil testing program in 2020. The objective was to provide a soil inventory of rehabilitated areas through field soil assessment and laboratory testing aimed at improving the growth medium for future revegetation.

The field program was designed to obtain representative samples within each rehabilitation area. Sampling points were irregularly located according to the survey team judgement to enable the delineation of potential soil boundaries based on year of rehabilitation or change in soil type used as growth medium. Soil test sites were excavated by hand to 0.3-0.5m. The number of survey points totalled 35 sites in the Northern Rehabilitation Area and 20 sites in the Southern Rehabilitation Area. This survey density fulfilled the requirement of a 1:10,000 soil survey. Sampling consisted of one bulked topsoil sample at each site with typical sample depth 0-10cm, with occasional 'subsoil' samples taken at 30-40cm for assessment of erosion tunnelling risks.

The laboratory testing suite for these sites included pH and EC (1:5 water); pH (1:5 CaCl); Available (Ammonium, Nitrate, Sulfur); Exchangeable Sodium, Potassium, Calcium, Magnesium, Hydrogen, Aluminium, Cation Exchange Capacity; Colwell Phosphorus; Available Micronutrients Zinc, Manganese, Iron, Copper, Boron, Silicon; Total Carbon (TC), Total Nitrogen (TN), TC/TN Ratio, Organic Matter; Basic Colour, Basic Texture.

The findings indicate that the soil resources used on the rehabilitated areas at TCM, depth and characteristic of the topsoil layer provide an adequate growth medium to establish the desired vegetation species. Following recommendations of the soil specialist, gypsum was used to improve characteristics of topsoil spread on the Southern Emplacement area prior to the start of revegetation activities.

Topsoil was stripped from areas cleared of vegetation in accordance with the stripping ratio recommended by a soil consultant. In one area of rehabilitation, topsoil was direct placed. All other areas, topsoil was spread from pre-existing stockpiles that were showing significant signs of regeneration.

Erosion and Sediment control

Erosion was recorded at multiple sites through the rehabilitation monitoring program:

- The 2021 rehabilitation areas had gully and tunnel erosion.
- The 2013 and 2024 areas had moderate rill erosion (small channels forming due to water runoff).
- The 2019 rehabilitation areas had gully erosion

Known locations of erosion observed in 2023 areas were remediated within the reporting period. A rehabilitation erosion maintenance program is scheduled to occur in 2026 and will ensure the most prominent erosion areas are remediated.

Water infrastructure including diversion drains were designed and sized in accordance with the *Managing-urban-stormwater-soils and construction guide* (volume-2E-fourth edition). TCM continued the construction of drains at the top and north-east of the Southern Rehabilitation area.

In accordance with RMP requirement and TARPs, TCM will continue to implement erosion control measures and remediate affected areas to meet the completion criteria for mine landform stability.

8.2.4 Renovation or Removal of Buildings

No buildings have been moved or erected in the reporting period.

8.2.5 Other Rehabilitation Undertaken

No additional rehabilitation of exploration areas, infrastructure, shafts, dams, fence lines or bunds occurred during the reporting period.

8.2.6 Departmental Sign-off of Rehabilitated Areas

Departmental sign-off has not been requested for any rehabilitated areas during the reporting period.

8.2.7 Variations in Activities against Forward Program

No variations were made to the Forward Program during the reporting period. TCM achieved the targeted amounts for both Landform Prepared for Rehabilitation and Ecosystem Establishment. A new Forward Program will commence on the 1st of January 2026.

8.2.8 Trials, Research Projects and Initiatives

In 2021 TCM engaged Aspect Ecology to undertake a Ground Flora Rehabilitation Study. The overall study aims were to:

1. Identify and evaluate management methods to reduce exotic ground flora, and
2. Identify and evaluate methods to enhance groundcover diversity and cover/abundance

3. Apply findings from aims 1 and 2 to produce management recommendations for Whitehaven Coal.

In 2022, project activities focussed on:

- database searches;
- review of abstracts against article inclusion criteria; and
- research article compilation and evaluation.

The interim report evaluated the existing literature and concluded that control of exotic species is crucial in the first few years following seeding. This Ground Flora Rehabilitation Study continued during 2025. TCM will continue to implement weed spraying controls in rehabilitated areas as vegetation establishes.

The nearby Whitehaven Coal mine, Maules Creek coal mine has a requirement to undertake a \$1M research program into rehabilitation of Box Gum Grassy Woodland upon mine rehabilitation, the findings from which has been considered by TCM and will be integrated into the Rehabilitation Management Plan as appropriate.

8.2.9 Key challenges to Achieving Successful Rehabilitation

The key issues to achieving successful rehabilitation include:

- Improved landform design and site water modelling to reduce erosion and sedimentation (e.g. gullying and sedimentation resulting in land stability and vegetation growth issues);
- weed and feral animal control;
- Native vegetation establishment corresponding to identified PCT (Plant Community types);
- landform stability; and
- climate/ and extreme weather conditions

In cases where the performance is sub-optimal, additional management measures will be implemented (e.g. replanting, repairing landforms and water management features, application of mulch/fertilisers, feral animal and weed control etc.). A Trigger Action Response Plan (TARP) for rehabilitation at the TCM has been included in the RMP, which outlines appropriate actions and varied responses that will be implemented as required.

8.3 Actions for Next Reporting Period

Vegetation clearing will be undertaken during the approved window from 15th Feb to 30th April 2026. Approximately 4.9ha of vegetation is proposed to be cleared in the 2026 clearing program.

Community and complaints

In accordance with MP 11_0047, a Community Consultative Committee (CCC) meeting was held on a quarterly basis at TCM. The committee comprised representatives of Gunnedah Shire Council, Narrabri Shire Council, TCM and the community including landholders.

TCM maintained a designated community complaints line. In the event of a complaint, details pertaining to the complainant, complaint and action taken are recorded. Each complaint is investigated and documented with individual complaint records maintained. Complaints are reported and findings discussed with CCC members during meetings. These meetings give an opportunity to provide an update of the environmental and operational performance.

TCM recorded three complaints during 2025 regarding Blasting and Traffic.

1. The complaint was made to the community complaints line in March of 2025. This was in relation to a strong sulphur smell and loud noise following a blast. TCM staff contacted the community member and advised that the blast observed was within compliance approved monitoring limits and within required weather conditions for blasting at Tarrawonga.
2. The complaint was made to the community complaints line regarding a loud noise following a blast at Tarrawonga Mine site that scared birds in the area. The community complainant was contacted and advised that the blast observed was within compliance approved monitoring limits for blasting.
3. The complaint was made to the community complaints line regarding a Tarrawonga mine worker who overtook the complainant in an unsafe manner whilst using a road not authorised for general mine related traffic. The incident was investigated and all mine workers and contractors have been advised of the need to travel to and from work in a safe manner and only use approved roads whilst travelling to or from the mine site.

The number of complaints has significantly decreased in recent years.

Table 8-3 provides a comparison of complaints received since 2017 annual reporting period.

Table 8-3 - Complaints Summary

Category	2017	2018	2019	2020	2021	2022	2023	2024	2025
<i>Air Quality</i>	3	1	0	0	0	0	0	0	0
<i>Traffic</i>	0	0	0	0	0	0	0	0	1
<i>Surface Water</i>	0	0	0	0	0	0	0	0	0
<i>Visual Amenity</i>	0	0	0	0	0	0	0	0	0
<i>Noise / Vibration</i>	0	0	0	1	0	1	0	0	0
<i>Blast</i>	0	0	0	1	1	0	1	1	2
<i>Other</i>	0	0	0	0	0	0	0	1	0
TOTAL	3	1	0	1	1	1	1	2	3

Note: Some complaints may relate to more than one category.

8.4 Community Contributions

Community contributions continued to be managed in accordance with the Whitehaven Coal Donations and Sponsorship Policy. Whitehaven supports a range of community, not-for-profit and charitable organisations. In 2025, support for the community in NSW totalled more than \$1M.

Organisations included:

- 2025 Tamworth Science & Engineering Challenge
- Australian Bushman's Campdraft and Rodeo Association
- Baan Baa Tennis Club
- Barraba Central School
- Barraba Junior touch Football Association Inc
- Barraba Public School
- Bellata Common Trust
- Black n Blue Boxing Gunnedah
- Boggabri & District Rugby League Football Club Inc
- Boggabri Anglican Church
- Boggabri Business Chamber
- Drovers Campfire
- Boggabri Gunnedah Gun Club
- Boggabri Joeys Playgroup
- Boggabri Junior Rugby League Club
- Boggabri Men's Shed
- Boggabri Pony Club
- Boggabri Public School
- Boggabri Showground and Public Recreation Land Manager
- Boomerangs Sports Club
- Business NSW
- CanAssist
- Carinya Christian School
- Challenge Community Services
- Childrens Medical Research Institute
- Clontarf Academy
- Connecting with Bricks
- Cougars Baseball Club
- Country Education Foundation of the Namoi

- Cure Brain Cancer Foundation
- Curlewis Public School
- Deadly Dance Academy
- Awesome Opportunities Basketball
- Dorothea Mackellar Poetry Society
- Dymocks Children's Charities
- Eulah Creek Recreation Reserve Land Manager
- Fairfax Public School Parents & Citizens Association
- Foundation boxing
- G.S Kidd Memorial Public School
- Gomeroi Roos
- Group 4 Rugby League
- Gunnedah & District Chamber of Commerce
- Gunnedah & District Soccer Association
- Gunnedah and District Australian Football Club
- Gunnedah Athletics Centre
- Gunnedah Baptist Community Preschool
- Gunnedah Bulldogs Rugby League Football Club
- Gunnedah Cricket Club
- Gunnedah Family Support
- Gunnedah Gymnastics
- Gunnedah High School
- Gunnedah Kennel Club
- Gunnedah Meals on Wheels
- Gunnedah Ministers Fraternal
- Gunnedah Mountain Bikers
- Gunnedah MS Incorporated
- Gunnedah Show Society
- Gunnedah South Public-School P & C Association
- Gunnedah Triathlon Club
- Huskies Baseball Club Inc
- Inverell Bear Eaters Elders Group
- Kamilaroi Lightning
- Kootingal Moonbi Rugby League Football Club
- Lake Keepit Family Fishing Club
- Little Wings
- Manilla Show Society
- Maules Creek Campdraft
- Movember Foundation
- Mullaley Cricket Club
- Namoi Valley Christian School
- Narrabri & District Junior Rugby League
- Narrabri & District Pony Club
- Narrabri Arts Eisteddfod
- Narrabri Clay Target Club
- Narrabri Dirt Bike Club
- Narrabri Dolphins Water Polo Club
- Narrabri High School
- Narrabri Hospital
- Narrabri Jockey Club
- Narrabri Junior Rugby Club
- Narrabri Local Aboriginal Land Council
- Narrabri Polocrosse Club
- Narrabri Racecourse Land Manager
- Narrabri RSL subbranch
- Narrabri Rugby League Football Club
- Narrabri Show Society
- National Breast Cancer Foundation
- New England Quarter Horse Association
- Nexus Health and Wellbeing
- Ngaarr Thawun Rural Ag and Environmental Sustainability Indigenous Corporation

- Northern Inland Academy of Sport
- Nosh Narrabri
- NSW Aboriginal Golf Incorporated
- Nungaroo Local Aboriginal Land Council
- Parkinsons Support Group of Narrabri
- PCYC Gunnedah
- Pink Shenanigan's Crew
- Premer Public School
- Quirindi Branch of the Country Women's Association
- Quirindi Grasshoppers Rugby League Football Club
- Quirindi RSL Subbranch
- Red Chief LALC
- Rotary Club of Gunnedah West
- Rotary Club of Narrabri
- Rotary Club of Tamworth West
- Royal Far West
- Sacred Heart School
- Spring Ridge Public School P & C Association
- Square and Round Dance Association of NSW
- St Francis Xaviers Narrabri
- St Mary's College Gunnedah
- Summit Community Services Inc
- Swimming Gunnedah Inc
- Tambar Springs Progress Association
- Tamworth and District Campdraft Club
- Tamworth Business Chamber
- Tamworth Crows
- The Tiny Foxes Pty Ltd
- VRL Memorial women's rugby league team
- Wean Jockey Club
- Wee Waa Aboriginal Local Land Council
- Wee Waa High School
- Wee Waa Lions Club
- Wee Waa Show Society Inc
- Weeks of Speed Gunnedah
- Werris Creek Golf Club Anglers Club
- Werris Creek Public School
- Werris Creek Rugby League Club
- Werris Creek Swimming Club
- Westpac Rescue Helicopter Service
- White Elephant Ball
- Yallambee Homes for the Aged

9 INDEPENDENT AUDIT

In 2023, TCM was required to complete both an Independent Environmental Audits (IEA) and Independent Biodiversity Audit (IBA). Details of previous audits and a brief outcome of these audits conducted in 2023 are discussed below, and the next IEA will be addressed in the following reporting period (2026).

9.1 Independent Biodiversity Audit (EPBC)

The Commonwealth Department of Agriculture, Water and Environment (DAWE) directed TCM to undertake an Independent Compliance Audit of the EPBC Approval 2011/5923 including site inspections of the mine site and Willeroi BOA. An audit was required during the reporting period.

The Tarrawonga Independent Biodiversity Audit was completed by 11 August 2023 and submitted to NSW DPE and accepted on 22 November 2023 as satisfying NSW Project Approval 11_0047 Schedule 3 Condition 50. The Tarrawonga Independent Biodiversity Audit 2023 identified two additional management measures for the Mine Rehabilitation than those identified in the RMP and BMP recommended to be implemented to improve rehabilitation outcomes. The Audit also found for the BOS that the revegetation is progressing adequately towards the completion criteria, and no additional measures are required to augment the TCM BOS. The Tarrawonga Independent Biodiversity Audit identified no non-compliance. There was no Leard Forest Regional Biodiversity Strategy Review during the reporting period. Next Independent Biodiversity Audit is due by the end of September 2026.

9.2 Independent Environmental Audit (IEA)

In accordance with Sch 5, Cond 10 of MP 11_0047, a 3 yearly Independent Environmental Audit (IEA) and Biodiversity component was conducted between July and August 2023.

Comments regarding the 2023 IEA's can be found in the 2023 Annual Review and can be found on Tarrawonga's website, as well as the full audit reports.

The next IEA is scheduled to be completed in 2026.

9.3 Reportable Incidents

On the 29 October 2025 TCM reported an exceedance of the PM10 24hr average limit set out within Schedule 3 Condition 24 of 50 $\mu\text{g}/\text{m}^3$. The 24hr average PM10 levels at Coomalgalah HVAS monitor was 167 $\mu\text{g}/\text{m}^3$ on the 9th of October 2025. TCM initiated an Investigation by an air quality specialist to

identify the cause of the event, and it was determined that TCM contributed $<1\mu\text{g}/\text{m}^3$ or $<1\%$ of the total reported level of $167\mu\text{g}/\text{m}^3$.

It was determined likely that the results obtained at the Coomalgah HVAS monitor was impacted by a localised dust source not related to Tarrawonga Mining operations. No further action was deemed to be required.

9.4 Non-compliances

Tarrawonga had no non-compliances during the reporting period.

Table 9-1 - Non-compliance Action plan

Non - Compliance	Date / Location	Cause	Action Plan	Status/Estimated Completion Date
No non-compliances for 2025				

9.5 Regulatory Actions

No regulatory action was undertaken on Tarrawonga during the reporting Period.

10 ACTIVITIES TO BE COMPLETED IN THE NEXT REPORTING PERIOD

The following measures will be continued or implemented in the next reporting period:

Table 10-1 - Summary of activities for 2025

	Activity Description	Timing
1	Update and review Environmental management plans as required by the MP 11_0047.	Ongoing throughout the year
2	Undertake rehabilitation and mining activities in accordance with the most recent Forward Program.	Ongoing throughout the year
3	Continue environmental monitoring and management.	Ongoing throughout the year
4	Continue implementation of approved Leard State Forest Mining Precinct Strategies.	Ongoing throughout the year
5	Continue community liaison and engagement with local stakeholders	Ongoing throughout the year

Appendix 1: Blast Monitoring Data

BLAST MONITORING DATA

Environmental Blast Monitoring



Tarrawonga Coal Pty Ltd
ACN 100 742 185

SHOT NO	LOCATION I.D	DATE	MONITOR LOCATION	PEAK OVERPRESSURE (dBL)	PEAK GROUND PRESSURE (mm/s)	Shot Time	Fume Rating	Trigger Event Code	Comments
1345	TN34_0611_JE	10-Jan	Coomalgah	96.10	0.56	11.06am	NIL	TRG2M4	
			Tarrawonga	110.80	0.6				
1346	TC37_0711_RL350 / TC34_0710_JE_PS	15-Jan	Coomalgah	100.20	0.55	1.25pm	NIL	TRG2M5	
			Tarrawonga	98.50	0.35				
1347	TC34_0710_JE	25-Jan	Coomalgah	97.90	0.33	9.07am	NIL	TRG2M8	
			Tarrawonga	106.40	0.46				
1348	TN30_0105_NG	30-Jan	Coomalgah	110.00	0.08	4.02pm	NIL	TRG2MA	
			Tarrawonga	102.20	0.1				
1349	TC 34_0710_JE	6-Feb	Coomalgah	96.60	0.05	11.26am	NIL	TRG2MD	
			Tarrawonga	89.90	0.05				
1350	TC54_19_NG	8-Feb	Coomalgah	84.00	0.15	9.02am	NIL	TRG2ME	
			Tarrawonga	93.70	0.13				
1351	TC34_0106_JE_PS, TN34_0206_MN_PS	13-Feb	Coomalgah	96.80	0.59	11.57am	NIL	TRG2MF	
			Tarrawonga	106.30	0.59				
1352	TN30 0608 NG	15-Feb	Coomalgah	93.50	0.06	4:11pm	NIL	TRG2MG	
			Tarrawonga	87.20	0.04				
1353	TN37 0511 RL320 +PS-A	25-Feb	Coomalgah	98.40	0.27	15:11	NIL	TRG2MO	
			Tarrawonga	102.00	0.42				
1354	TN/TC34 0206 JE	7-Mar	Coomalgah	102.60	0.35	10:58	NIL	TRG2MR	2 Complaints Received
			Tarrawonga	103.80	0.48				
1355	TN37105 BC BR	15-Mar	Coomalgah	88.00	0.18	4:35pm	NIL	TRG2MS	
			Tarrawonga	99.30	0.32				
1356	TN37_0508_BC	18-Mar	Coomalgah	85.90	0.04	4.00pm	NIL	TRG2MT	
			Tarrawonga	89.90	0.04				
1357	TN32_0810_VY_PS, TN34_0610_MN_V2	21-Mar	Coomalgah	91.20	0.1	3.58pm	NIL	TRG2MU	
			Tarrawonga	84.40	0.21				
1358	7_1113_BR, TC37_0508	25-Mar	Coomalgah	96.20	0.04	11:37am	NIL	TRG2MV	
			Tarrawonga	92.60	0.06				
1359	TC37_0711_320RL	2-Apr	Coomalgah	96.70	0.31	1:19pm	NIL	TRG2N1	
			Tarrawonga	102.40	0.33				
1360	TN31_0710_VY, TN31_0710_VY_MS	9-Apr	Coomalgah	105.80	0.31	4:30	NIL	TRG2N2	
			Tarrawonga	114.50	1.1				
1361	TC34_0810_MN_PS	12-Apr	Coomalgah	101.60	0.3	11:18	1A	TRG2N3	
			Tarrawonga	103.30	0.3				
1362	TN31_0610_VY	17-Apr	Coomalgah	89.50	0.37	11:51	NIL	TRG2N4	
			Tarrawonga	97.10	1.2				
1363	TE01_01_350RL	22-Apr	Coomalgah	86.60	0.46	12:43	NIL	TRG2N5	
			Tarrawonga	93.50	0.59				
1364	TN37_01_BC	26-Apr	Coomalgah	88.40	0.11	3:53pm	NIL	TRG2N9	
			Tarrawonga	94.60	0.08				
1365	TN34_0407_MN	30-Apr	Coomalgah	81.10	0.16	12:50pm	NIL	TRG2NB	
			Tarrawonga	80.10	0.15				
1366	TN34_0104_MN	5-May	Coomalgah	82.00	0.19	4:26pm	NIL	TRG2ND	
			Tarrawonga	97.90	0.28				
1367	TC34_0710_MN	10-May	Coomalgah	89.50	0.23	4:10pm	NIL	TRG2NF	
			Tarrawonga	112.70	0.38				
1368	TN34_01_MN	13-May	Coomalgah	91.70	0.23	12:54pm	NIL	TRG2NG	
			Tarrawonga	102.60	0.75				
1369	TC34_0306_MN	17-May	Coomalgah	89.30	0.17	2:29pm	NIL	TRG2NH	
			Tarrawonga	112.80	0.47				
1370	TN37_0812_BC	23-May	Coomalgah	98.90	0.05	4:07pm	1A	TRG2NO	
			Tarrawonga	100.30	0.09				
1371	TN37_01_JE_PS	26-May	Coomalgah	83.50	0.6	1:02pm	1R	TRG2NP	

Lot	Tract/Block	Survey	Location	Area (sq. ft.)	Area (ac.)	Time	Tract	Tract No.	
1372	TN36_01_274RL	10-Jun	Tarrawonga	98.60	0.5				
			Coomalgah	100.80	0.64				
			Tarrawonga	99.00	0.85	11:30am	2A	TRG2NT	
1373	TN32_0310_NG_PS	16-Jun	Coomalgah	82.00	0.32				
			Tarrawonga	92.20	0.59	11:52am	1A	TRG2NV	
1374	TN37_0506_RL274	1-Jul	Coomalgah	96.10	0.38				
			Tarrawonga	95.80	0.26	10:38am	2A	TRG206	
1375	TN31_0710_NG	3-Jul	Coomalgah	93.30	0.1				
			Tarrawonga	92.20	0.08	3:21pm	NIL	TRG208	
1376	TN31_0206_NG	11-Jul	Coomalgah	88.50	0.09				
			Tarrawonga	92.90	0.18	12:50PM	NIL	TRG2OC	
1377	TN_0709_274RL + PS	18-Jul	Coomalgah	89.00	0.22				
			Tarrawonga	99.50	0.22	11:59am	1B	TRG2OF	
1378	TN_37_1012_RL	29-Jul	Coomalgah	90.30	0.21				
			Tarrawonga	101.20	0.2	1:05pm	1B	TRG2OJ	
1379	TE02_12_RL350	12-Aug	Coomalgah	98.60	0.08				
			Tarrawonga	97.80	0.11	11:19am	1A	TRG2OU	
1380	TN32_0610_VY	16-Aug	Coomalgah	103.80	0.35				
			Tarrawonga	105.60	0.72	10:06am	NIL	TRG2OX	
1381	TN37_405_RL274_TRIM	25-Aug	Coomalgah	86.50	0.45				
			Tarrawonga	86.40	0.44	11:41am	NIL	TRG2P2	
1382	TN32_0105_VY	29-Aug	Coomalgah	100.00	0.41				
			Tarrawonga	98.50	0.59	10:02am	NIL	TRG2P3	
1383	TC34_0307_VY	5-Sep	Coomalgah	87.00	0.22				
			Tarrawonga	99.00	0.34	11:53am	NIL	TRG2P4	
1384	TN37_0105_JE	13-Sep	Coomalgah	101.10	0.68				
			Tarrawonga	106.20	0.52	11:54am	1A	TRG2PC	
1385	TN37_0506_JE	20-Sep	Coomalgah	106.00	0.52				
			Tarrawonga	99.40	0.46	13:55PM	1A	TRG2PG	
1386	TN39_0205_BR	1-Oct	Coomalgah	100.00	0.13				
			Tarrawonga	102.80	0.17	9:10am	NIL	TRG2PL	
1387	TN37_0712_MN_PS	11-Oct	Coomalgah	97.80	0.27				
			Tarrawonga	89.50	0.42	9:02am	NIL	TRG2PO	
1388	TN32_0104_NG	13-Oct	Coomalgah	87.20	0.09				
			Tarrawonga	87.20	0.07	11:01am	NIL	TRG2PP	
1389	TN32_0510_NG	18-Oct	Coomalgah	84.20	0.09				
			Tarrawonga	87.80	0.08	9:01am	NIL	TRG2PR	
1390	TN37_0610_NG, TC37_07_325RL, TC37_09_320PL	28-Oct	Coomalgah	105.40	0.19				
			Tarrawonga	105.60	0.25	9:01am	1A	TRG2PX	
1391	TN37_0708_JE	3-Nov	Coomalgah	109.70	0.23				
			Tarrawonga	106.30	0.24	12:54am	Nil	TRG2PZ	
1392	TN37_12_JE	18-Nov	Coomalgah	87.20	0.22				
			Tarrawonga	99.10	0.17	11:24	NIL	TRG2Q1	
1393	TN37_01_MN	25-Nov	Coomalgah	115.30	0.25				
			Tarrawonga	89.70	0.44	16:05	1a	TRG2Q3	within 5%
1394	TC37_04_BR	2-Dec	Coomalgah	101.40	0.45				
			Tarrawonga	89.90	0.51	11:39	NIL	TRG2Q7	
1395	TC37_0507_BR	12-Dec	Coomalgah	101.20	0.34				
			Tarrawonga	102.90	0.25	11:28	1A	TRG2QF	
1396	TC37_1014_RL312_TE 01_13_RL343	19-Dec	Coomalgah	107.00	0.29				
			Tarrawonga	102.70	0.31	11:15		TRG2QH	

Appendix 2: HVAS Monitoring Data

HVAS MONITORING DATA

COOMALGAH PM₁₀ 24Hrs average at HIGH VOLUME AIR SAMPLER

Date	µg/m ³	Comments
6/01/2025	20.5	
12/01/2025	6.3	
18/01/2025	7.8	
24/01/2025	44.6	
30/01/2025	22.7	
5/02/2025	29.4	
11/02/2025	10.5	
17/02/2025	12.6	
23/02/2025	10.5	
1/03/2025	29.8	
7/03/2025	18.5	
13/03/2025	12	
19/03/2025	15.8	
25/03/2025	10.5	
31/03/2025	5.8	
4/06/2025	14.6	
4/12/2025	10.5	
18/04/2025	20.5	
24/04/2025	24.8	
30/04/2025	8.2	
5/06/2025	5.9	
5/12/2025	11.8	
18/05/2025	14.8	
24/05/2025	8.8	
30/05/2025	7.1	
6/05/2025	0.7	
6/11/2025	3.4	
17/6/2025	10.8	
23/6/2025	25.7	
29/6/2025	25.4	
5/07/2025	10.6	
11/07/2025	11.5	
17/07/2025	6.7	
23/7/2025	3.7	
29/7/2025	7	
4/08/2025	10.5	
16/08/2025	7.2	
22/08/2025	4.7	
28/08/2025	6.6	
3/09/2025	16.3	
9/09/2025	11.6	
15/09/2025	11.6	
21/09/2025	4.6	
27/09/2025	18.7	
3/10/2025	15.1	
9/10/2025	167	Elevated result - Reported to DPIE and Investigated - Not attributed to TCM
15/10/2025	21.6	
21/10/2025	21.7	
27/10/2025	22.1	
2/11/2025	11.1	
8/11/2025	9.5	
14/11/2025	20.1	
20/11/2025	16.0	
26/11/2025	12.8	
2/12/2025	1.3	
8/12/2025	8.6	
14/12/2025	5.5	
20/12/2025	25.9	
26/12/2025	14.9	

Appendix 3: SW Monitoring Data

SURFACE WATER MONITORING DATA

Quarterly Surface Water Monitoring Results

Date	Sample Location	pH	EC (µS/cm)	Total Suspended Solids (mg/L)	Total Organic Carbon (mg/L)	Grease & Oil (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Comments
5 March 2020	VOID	8.17	2420	380	4	<5	0.001	0.001	0.001	0.01	
6 May 2020	VOID	7.8	3290	34	<1	<5	----	0.012	----	----	
28 August 2020	VOID	8.36	3600	25	30	<5	----	----	----	----	
12 November 2020	VOID	8.58	1700	40	2	5	----	----	----	----	
12 February 2021	VOID	8.5	2040	42	<1	<5	0.03	0.008	0.06	<0.01	
17 May 2021	Void	8.72	1540	17	-	<5	-	0.004			
16 August 2021	Void	8.84	1240	11	-	<5	-	0.006			
19 November 2021	Void	8.78	1970	64	-	<5	-	0.014		0.01	

Date	Sample Location	pH	EC (µS/cm)	Total Suspended Solids (mg/L)	Total Organic Carbon (mg/L)	Grease & Oil (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Comments
14 March 2022	VOID	8.36	3060	8	2	<5	0.003	0.002	0.058	<0.01	
4 July 2022	VOID	8.52	2730	31	4	<5	-	0.02	0.064	<0.01	
18 August 2022	VOID	8.59	1050	18	-	<5	-	0.004	-	-	
18 November 2023	Void	8.5	1850	7	0.024	<0.001	0.004	0.003	0.025	<0.01	

Date	Sample Location	pH	EC (µS/cm)	Total Suspended Solids (mg/L)	Total Organic Carbon (mg/L)	Grease & Oil (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Comments
14 February 2023	Void	8.63	2900	22	-	<5	-				
17 May 2023	Void	8.66	2700	7	-	<5	-				

Date	Sample Location	pH	EC (µS/cm)	Total Suspended Solids (mg/L)	Total Organic Carbon (mg/L)	Grease & Oil (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Comments
21 August 2023	Void	8.22	2920	1080	-	<5	-				
12 December 2023	Void	8.92	3300	51	-	<5	-				
10 February 2024	Void	9.26	3750	22	-	<5	-				

Date	Sample Location	pH	EC (µS/cm)	Total Suspended Solids (mg/L)	Total Organic Carbon (mg/L)	Grease & Oil (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Comments
11 March 2024	Void	7.89	2880	105	-	<5	-				
24 March 2024	Void	8.70	461	1520	-	<5	-				

Date	Sample Location	pH	EC (µS/cm)	Total Suspended Solids (mg/L)	Total Organic Carbon (mg/L)	Grease & Oil (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Comments
22 April 2024	Void	8.44	3430	84	-	<5	-	0.032	0.072	<0.01	
7 August 2024	Void	8.70	461	1520	-	<5	-				
28 November 2024	Void	8.44	3430	84	-	<5	-	0.032	0.072	<0.01	

Date	Sample Location	pH	EC (µS/cm)	Total Suspended Solids (mg/L)	Total Organic Carbon (mg/L)	Grease & Oil (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Comments
14 February 2025	Void	8.95	3540	74	-	<5	-	0.02	-	-	
8 May 2025	Void	8.07	500	1040	-	<5	-	0.005	0.008	<0.01	
11 August 2025	Void	8.49	718	12	-	<5	-	0.006	-	-	
24 November 2025	VOID	8.7	1734	10		<5		0.012	0.043	<0.01	

Appendix 4: GW Monitoring Data

GROUNDWATER MONITORING DATA

[illegible]

Sample location	Date	Depth to ground -m/g	Field Parameters			Major Anions			Major Cations			Total Metals														TPH GC-9	TPH GC-36	TPH GC-10	TPH GC-40																		
			Depth to stand -m/ft			EC -lab -µS/cm	Total Dissolved Solids	Hydroxide Alkalinity as CaCO3 -mg/L	Chloride Alkalinity as CaCO3 -mg/L	Bicarbonate Alkalinity as CaCO3 -mg/L	Sulfate (SO4)- -mg/L	Chloride (Cl) -mg/L	Calcium (Ca)- -mg/L	Magnesium (Mg)- -mg/L	Sodium (Na)- -mg/L	Potassium (K)- -mg/L	Aluminum (Al)- -mg/L	Manganese (Mn)- -mg/L	Barium (Ba)- -mg/L	Beryllium (Be)- -mg/L	Calcium (Cd)- -mg/L	Cobalt (Co)- -mg/L	Chromium (Cr)- -mg/L	Copper (Cu)- -mg/L	Manganese (Mn)- -mg/L					Nickel (Ni)- -mg/L	Lead (Pb)- -mg/L	Selenium (Se)- -mg/L	Vanadium (V)- -mg/L	Zinc (Zn)- -mg/L	Iron (Fe)- -mg/L	Mercury (Hg)- -mg/L	Ammonia as Nitrogen (N)	Nitrate as N -mg/L	Nitrite as N -mg/L	Nitrate + Nitrite as N -mg/L	Total Anions -mg/L	Total Cations -mg/L	Ionic balance				
			pH	pH	Field -µS/cm																																										
			Temp -Field -°C	pH	Lab																																										
ANZECC Guideline - stock drinking water			4000			1000			1000			0.01 1 1 1 0.01 0.02 20 0.002														400																					
TEMPERATURE																																															
MW5	18-Mar-20	2.41	3.2	7.5	835	24.5	7.81	874	504	<1	<1	180	180	448	115	4	3	182	3	1.8	0.05	<0.05	0.018	<0.001	<0.0001	<0.001	<0.001	0.04	1	0.1	0.02	<0.01	0.01	0.02	1.35	<0.0001	0.03	<0.01	1.51	1.51	7.84	7.89	0.33	<20	<50	<20	<100
MW5	11-Jun-20	2.3	3.09	7.6	675	20.7	7.81	874	504	<1	<1	180	180	448	115	4	3	182	3	1.8	0.05	<0.05	0.018	<0.001	<0.0001	<0.001	<0.001	0.04	1	0.1	0.02	<0.01	0.01	0.02	1.35	<0.0001	0.03	<0.01	1.51	1.51	7.84	7.89	0.33	<20	<50	<20	<100
MW5	23-Sep-20	2.45	3.1	7.7	795	23.1	7.81	874	504	<1	<1	180	180	448	115	4	3	182	3	1.8	0.05	<0.05	0.018	<0.001	<0.0001	<0.001	<0.001	0.04	1	0.1	0.02	<0.01	0.01	0.02	1.35	<0.0001	0.03	<0.01	1.51	1.51	7.84	7.89	0.33	<20	<50	<20	<100
MW5	8-Dec-20	2.67	3.46	7.8	1950	18.1	7.81	874	504	<1	<1	180	180	448	115	4	3	182	3	1.8	0.05	<0.05	0.018	<0.001	<0.0001	<0.001	<0.001	0.04	1	0.1	0.02	<0.01	0.01	0.02	1.35	<0.0001	0.03	<0.01	1.51	1.51	7.84	7.89	0.33	<20	<50	<20	<100
MW5	4-Mar-21	2.56	3.35	7.36	874	23	7.47	885	575	<1	<1	245	245	42	129	4	4	193	3	5.72	0.006	<0.05	0.029	<0.001	<0.0001	<0.001	0.004	0.13	0.068	0.004	0.002	<0.01	0.01	0.029	4.01	<0.0001	0.03	<0.01	0.54	0.54	9.41	9	2.22	<20	<50	<20	<100
MW5	21-Jun-21	2.19	3.1	7.7	765	18.1	7.81	874	504	<1	<1	180	180	448	115	4	3	182	3	1.8	0.05	<0.05	0.018	<0.001	<0.0001	<0.001	<0.001	0.04	1	0.1	0.02	<0.01	0.01	0.02	1.35	<0.0001	0.03	<0.01	1.51	1.51	7.84	7.89	0.33	<20	<50	<20	<100
MW5	2-Sep-21	1.85	2.64	6.8	1771	19.8	7.7	1810	1100	<1	<1	423	423	90	282	7	8	373	7	5.73	0.009	<0.05	0.041	<0.001	<0.0001	<0.001	0.005	0.016	0.221	0.008	0.011	<0.01	0.01	0.102	3.5	<0.0001	0.03	<0.01	0.12	0.12	<20	<50	<20	<100			
MW5	28-Dec-21	1.82	1.61	6.7	2030	22.6	7.81	874	504	<1	<1	180	180	448	115	4																															

Sample Location	Date	Field Parameters				pH Lab	EC Lab µS/cm	Total Dissolved Solids	Major Anions					Major Cations					Total Metals															TPH GS	TPH CD-C6	TPH GS-LO	TPH CD-C40																																																																																																																																																																																																																																																																																															
		Depth to Ground -m/g	pH Field	EC Field µS/cm	Temp -field °C				Hydroxide Alkalinity as CaCO3 -mg/L	Chloride Alkalinity as CaCO3 -mg/L	Sulfate Alkalinity as CaCO3 -mg/L	Nitrate Alkalinity as CaCO3 -mg/L	Sulfate (SO4) -mg/L	Chloride (Cl) -mg/L	Calcium (Ca) -mg/L	Magnesium (Mg) -mg/L	Sodium (Na) -mg/L	Potassium (K) -mg/L	Aluminum (Al) -mg/L	Manganese (Mn) -mg/L	Iron (Fe) -mg/L	Zinc (Zn) -mg/L	Copper (Cu) -mg/L	Manganese (Mn) -mg/L	Nickel (Ni) -mg/L	Lead (Pb) -mg/L	Selenium (Se) -mg/L	Vanadium (V) -mg/L	Zinc (Zn) -mg/L	Iron (Fe) -mg/L	Mercury (Hg) -mg/L	Arsenic as Nitrogen (N) -mg/L	Nitrite as N -mg/L					Nitrate as N -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	Total Magnesium -mg/L	Total Sodium -mg/L	Total Potassium -mg/L	Total Calcium -mg/L	

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Sample Location	Date	Depth to Ground -m/gal	Field Parameters		pH - Lab	EC - Lab - µS/cm	Total Dissolved Solids	Major Anions				Major Cations				Total Metals												Mercury (Hg) -mg/L	Ammonia as Nitrogen (NH ₃) -mg/L	Nitrite as N -mg/L	Nitrate as N -mg/L	Nitrite + Nitrate as N -mg/L	Total Anions -mg/L	Total Cations -mg/L	Ionic Balance	TPH GS-C9	TPH C/D-C8	TPH GS-C10	TPH C/D-C10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
			pH - Field	EC - Field -µS/cm				Alkalinity as CaCO ₃ -mg/L	Chloride -mg/L	Sulfate (SO ₄) -mg/L	Calcium (Ca) -mg/L	Magnesium (Mg) -mg/L	Sodium (Na) -mg/L	Potassium (K) -mg/L	Aluminum (Al) -mg/L	Iron (Fe) -mg/L	Manganese (Mn) -mg/L	Copper (Cu) -mg/L	Zinc (Zn) -mg/L	Lead (Pb) -mg/L	Silver (Ag) -mg/L	Vanadium (V) -mg/L	Cadmium (Cd) -mg/L	Chromium (Cr) -mg/L	Cobalt (Co) -mg/L	Nickel (Ni) -mg/L	Molybdenum (Mo) -mg/L													Selenium (Se) -mg/L																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
ANZECC Guideline - stock drinking water																														0.002			400																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								</

[illegible]

[illegible]

[illegible]

Department of Planning, Housing and Infrastructure

As nominee of the Planning Secretary