SIMEC

MEMBER OF GFG ALLIANCE

Tahmoor Coal Pty Ltd

2025 ANNUAL REVIEW AND ANNUAL ENVIRONMENTAL MANAGEMENT REPORT

October 2026

This page has been left blank intentionally.

Document Control

PUBLICATION DATE:	31/10/2026
REVIEW DATE:	31/10/2026
AUTHOR(S):	Natalie Brumby – Environmental Specialist Nick Le Baut - Project Manager – Environmental Projects Amanda Bateman – Environment and Community Manager
REVIEW TEAM:	Natalie Brumby – Environmental Specialist Nick Le Baut - Project Manager – Environmental Projects Amanda Bateman – Environment and Community Manager
VERSION NUMBER:	**1.1**
COMMENTS:	**Final**

This page has been left blank intentionally.

Table of Contents

Table of Contents v

List of Figures vii

List of Tables ix

1 Title Block 1

2 Statement of Compliance 3

2.1 Tri-ennial Independent Audit 5

3 Introduction 6

3.1 Background 6

4 Approvals 9

5 Operations Summary 11

5.1 Mining Operations 11

5.2 Actions Required from Previous 2024 Annual Review 13

6 Environmental Performance 14

7 Operational Noise 17

7.1 Environmental Management 17

7.2 Environmental Performance 17

7.3 Further Improvements 18

8 Air Quality 21

8.1 Environmental Management 21

8.2 Environmental Performance 21

8.2.1 Depositional Dust 21

8.2.2 Continuous and Hi Vol Dust Monitoring 24

8.2.3 Total Suspended Particulate 25

8.2.4 Greenhouse Gas Emissions 28

8.2.5 Tahmoor South Project specific reporting 31

8.2.6 EIS Commitments 32

8.3 Further Improvements 34

9 Erosion and Sediment Control 35

9.1 Environmental Management 35

9.2 Environmental Performance 35

9.3 Further Improvements 35

10 Waste Management 36

10.1 Environmental Management 36

10.2 Environmental Performance 36

10.2.1 Onsite Sewage Management 37

10.2.2 Coal Washery Refuse (CWR) 37

10.3 Further Improvements 38

11 Contaminated Land 40

11.1 Environmental Management 40

11.2 Environmental Performance 40

11.3 Further Improvements 41

12 Subsidence 42

12.1 Environmental Management 42
12.1.1 Western Domain 42
12.1.2 Tahmoor South Domain 42
12.2 Environmental Performance 46
12.2.1 Western domain 46
12.2.2 Tahmoor South Domain 46
12.2.3 Further Improvements 49
12.3 Subsidence 49
12.3.1 Western Domain 49
12.3.2 Tahmoor South Domain 50
12.3.3 Further Improvements 54
12.4 Biodiversity 54
12.4.1 Tahmoor Mine Site 54
12.4.2 Tahmoor North Domain 54
12.4.3 Tahmoor South Domain 60
12.4.4 Further Improvements 71
12.5 Heritage Monitoring 71
12.5.1 Aboriginal Heritage 71
12.5.2 Historical Heritage 73
12.5.3 Further Improvements 75
12.6 Built Features Monitoring 75
12.6.1 Western Domain 75
12.6.2 Tahmoor South Domain 77
12.7 Public Safety 87
12.8 Surface Water Monitoring 87
12.8.1 Tahmoor South Domain 88
12.8.2 Further Improvements 111
12.9 Groundwater Monitoring 111
12.9.1 Western Domain 111
12.9.2 Tahmoor South 112
12.10 Land Monitoring 131
12.10.1 Tahmoor South Domain 131
12.10.2 Further Improvements 133

13 Site Water Management 137

13.1 Groundwater 137
13.1.1 Environmental Management 137
13.1.2 Water Access Licences Environmental Performance 139
13.1.3 Further Improvements 141
13.2 Surface Water 141
13.2.1 Environmental Management 141
13.2.2 Environmental Performance 145
13.2.3 Further Improvements 149

14 Rehabilitation 150

14.1 Environmental Performance 150
14.1.1 Rehabilitation Stages Monitoring Results 151

14.1.2 Erosion Controls: 152
14.1.3 Grass Trials: 152
14.1.4 Reference Plots: 152
14.1.5 Rehabilitation Performance 152
14.1.6 Rehabilitation and Emplacement Areas 155
14.1.7 Further Improvements 155
14.2 Actions for the Next Reporting Period 157
14.3 Mine Closure 158
14.3.1 Post mining Land use 158
14.3.2 Rehabilitation Indicators 158
15 Weeds 161
15.1 Environmental Management 161
15.2 Environmental Performance 161
15.3 Further Improvements 162
16 Bushfire Management 163
16.1 Environmental Management 163
16.2 Environmental Performance 163
16.3 Further Improvements 163
17 Traffic Management 165
18 Community 166
18.1 Community Engagement Activities 166
18.2 Community Contributions 166
18.3 Community Investment Program 167
18.4 Community Complaints 167
19 Incidents, Notifications and Non-Compliances 169
20 Activities to be completed during the next reporting period (1 January – 31 December 2026) 171
21 Related Documents 172
22 Abbreviations 174
23 Appendices 177

List of Figures

Figure 3-1 Mining Area and Tenure 8
Figure 5-1 Tahmoor South Domain A-Series Longwalls 12
Figure 7-1 Images of Noise Cladding installed for the CHPP Building 19
Figure 7-2 Locations of Noise Monitors and Noise Assessment Locations 20
Figure 8-1: Depositional Dust monitoring for current reporting period (2025) 23
Figure 8-2 Depositional Dust Monitoring Annual Average Comparison 23
Figure 8-3 Air Quality monitoring results for PM10 from 24hr High Volume dust monitors located at Olive Lane and Hodgson Grove. 24
Figure 8-4 Continuous PM10 annual average results from Charlies Point Road TEOM dust monitor. 25
Figure 8-5 Total Suspended Particulates Annual Average from 2015 to 2025. 26
Figure 8-6 Tahmoor South Air Quality monitoring locations 27
Figure 10-1: Smith & Loveless Sewage Treatment Plant (STP) onsite 37

Figure 10-2 Bin and Spill Kit Locations 39
Figure 12-1 LW S1A-S6A Extraction Plan Study Area (source: LW S1A-S6A Extraction Plan) 44
Figure 12-2 Overview of Environmental Management Structure for Tahmoor Coal (source: LW S1A-S6A Extraction Plan) 45
Figure 12-3 Development of observed subsidence above LW S3A (source: MSEC1430, Report R36) 51
Figure 12-4 Observed changes in horizontal distances between GNSS units during LW S3A extraction (source: MSEC1430 Subsidence Monitoring Report 36) 52
Figure 12-5 LW S1A-S6A Subsidence Monitoring Program (source: MSEC1430 Subsidence Monitoring Report 36, Appendix A) 53
Figure 12-6: Myrtle Creek Aquatic Ecology Monitoring Sites 55
Figure 12-7 Redbank Creek Aquatic Ecology Monitoring Sites 58
Figure 12-8 LW S1A-S6A Aquatic Ecology Monitoring Locations (source: Stantec, 2026a) 69
Figure 12-9 LW S1A-S6A Riparian Vegetation and Amphibian Monitoring Locations (source: Stantec, 2026b) 70
Figure 12-10 Aboriginal Heritage Monitoring Sites in the LW S1A-S6A Study Area (Source LW S1A-S6A Heritage Management Plan) 72
Figure 12-11 Historical Heritage Sites in the LW S1A-S6A Study Area and Surrounds (Source LW S1A-S6A Heritage Management Plan) 74
Figure 12-12: Observed development of ground strain along Remembrance Drive above central section of LW S3A over time 79
Figure 12-13: Observed development of ground strain and changes in vertical alignment at previously observed impact sites along Remembrance Drive 79
Figure 12-14 Tahmoor South A-Series Surface Water Monitoring Sites (source: ATC Williams, 2026a; Appendix 9) 107
Figure 12-15 Tahmoor South A-Series Pool Visual Inspection Sites (source: ATC Williams, 2026a; Appendix 9) 108
Figure 12-16 Visual depiction of surface water characteristics and physical effects during the December 2025 inspection of waterways report. (Report number: SWI-20251217) 109
Figure 12-17 A-Series Morphology and Channel Stability Monitoring Sites (source: ATC Williams, 2026a; Appendix 9) 110
Figure 12-18 LW S1A-S6A Groundwater Monitoring Site (source: LW S1A-S6A Water Management Plan) .. 129
Figure 12-19 WMP8 Shallow Groundwater Level (Open Standpipes and Private Bores) TARP triggers (source SLR, 2025; Appendix C). 130
Figure 12-20 Cliffs and natural slopes within the LW S1A-S6A Study Area 134
Figure 12-21 Dams within the LW S1A-S6A Study Area 135
Figure 12-22 Agricultural land and inspection sites within the LW S1A-S6A Study Area 136
Figure 13-1 Locations of Piezometers at Pit-top and the REA areas 138
Figure 13-2 Piezometer groundwater levels for Pit-top (PT4) for 2025. 138
Figure 13-3 Piezometer groundwater levels for REA for 2025. 139
Figure 13-4 Calculated Groundwater Inflow Annual Volume (Water Year/Financial Year). 140
Figure 13-5 Volume (ML) of Discharge from LDP1 for the past 10 years. 142
Figure 13-6 Daily Discharge (kL) via LDP1 143
Figure 13-7 Daily total rainfall from Stockpile weather station 144
Figure 14-1 Rehabilitation Stages and features noted during the Annual Rehabilitation Walkover during 2025. 154
Figure 14-2 Emplacement Areas for 2025 and 2026. 156
Figure 14-3 Final rehabilitation and post-mining land use and contours. 160
Figure 16-1 Asset Protection Zones (APZ) and Grounds Maintenance for Tahmoor Coal 164
Figure 18-1 Community Complaint Statistics 168

List of Tables

Table 1-1 Title Block 1
Table 2-1 Statement of Compliance (2025) 3
Table 2-2 Non-Compliance Summary (2025) 4
Table 2-3 Compliance status key to Table 2-2 Non-Compliance summary 5
Table 3-1 Tahmoor Coal Contacts 7
Table 5-1 A-Series Longwall Mining Schedule 11
Table 5-2 Production Summary 13
Table 5-3 Actions from previous Annual Review 13
Table 6-1 Environmental Performance 14
Table 8-1 Depositional Dust Gauge Data 22
Table 8-2 Total Suspended Particulates recorded for 2025. 25
Table 8-3 Annual Greenhouse Gas Emissions for Financial Year 28
Table 8-4 Calculated Scope 1 and 2 GHG Emissions 31
Table 8-5 Predicted Scope 1 and 2 GHG Emissions (Appendix 9 from SSD 8445 consent) 32
Table 8-6 EIS Commitments 32
Table 10-1 Waste Streams for Tahmoor Coal 37
Table 11-1 Hazardous Building Material Audit Actions 40
Table 12-1 Tahmoor South Subsidence Monitoring Observations for 2025 Monitoring Period (source: MSEC1430 Report R36) 50
Table 12-2: Myrtle Creek Indicative Ecological Recovery Summary – Autumn 2025 57
Table 12-3: Redbank Creek Indicative Ecological Recovery Summary – Autumn 2025 60
Table 12-4 Actions and Responses for Level 2 and 3 TARP Trigger for Aquatic Habitat and Macroinvertebrate Indicators (stream health) (TARP BMP1) 62
Table 12-5 Actions and Responses for a Level 4 TARP Trigger (Australian Wildlife Sanctuary Management Plan TARP) 85
Table 12-6 Actions and Responses for Level 1, 2 and 3 TARP Triggers for Pool Water Quality (TARP WMP1) 89
Table 12-7 Actions and Responses for Level 1, 2 and 3 TARP Triggers for Pool Water Level Reduction (TARP WMP3) 94
Table 12-8 Summary of mining related impacts to watercourse features (source: ATC Williams, 2026; Appendix 9) 99
Table 12-9 Actions and Responses for Level 1, 2 and 3 TARP Triggers for Physical Features and Natural Behaviour of Watercourses (TARP WMP5) 100
Table 12-10 Actions and Responses for Level 1 and 2 TARP Triggers for Channel Stability, Sedimentation and Erosion (TARP WMP7) 103
Table 12-11 Actions and Responses for Level 1, 2 and 3 TARP Triggers for Groundwater Level Reduction (TARP WMP8) 115
Table 12-12 Actions and Responses for Level 1,2 and 3 TARP Triggers for Shallow Groundwater Pressure (TARP WMP9) 119
Table 12-13 Actions and Responses for Level 1 and 2 TARP Triggers for Groundwater Water Quality (TARP WMP11) 123
Table 12-14 Actions and Responses for Level 1, 2 and 3 TARP Triggers for Groundwater – Surface Water Interactions (TARP WMP12) 126
Table 13-1 Summary of Groundwater Outflow 140
Table 13-2 Water take estimates from surface water sources for the 2025 reporting period 141
Table 13-3 Licensed Discharge and Overflow Points Locations 141

Table 13-4 Daily Discharge (KL) via Licence Discharge Point 1 (LDP1). 145
Table 13-5 LDP1 Discharge Water Quality 147
Table 13-6 Recycled and Potable Water Use 148
Table 14-1 Rehabilitation Summary 150
Table 14-2 TARP Classification 153
Table 14-3 TARP Rehabilitation Performance 153
Table 14-4 Rehabilitation Targets for 2026 157
Table 14-5 Rehabilitation Maintenance Activities 157
Table 14-6 Tahmoor Coal Closure Domains 159
Table 15-1 Weed Target Species 161
Table 18-1 Community Contributions in 2025 167
Table 19-1 2025 Non-compliances, Incidents and notifications 169
Table 21-1 Related Documents 172
Table 22-1 Abbreviations 174
Table 23-1 Appendix Details 177

1 Title Block

Table 1-1 Title Block

Name of operation	Tahmoor Mine
Name of operator	Tahmoor Coal Pty Ltd
Development consent / project approval #	DA 1975, DA 1979, DA 57/93, DA 67/98, DA 190/85, DA 162/76, SSD8445, EPBC 2017/8084
Name of holder of development consent / project approval	Tahmoor Coal Pty Ltd
Mining lease #	Tahmoor Coal Pty Ltd - ML1376, ML1308, ML1539, ML1642 & CCL716 Bargo Collieries Pty Ltd - CCL747
Name of holder of mining leases	Tahmoor Coal Pty Ltd Bargo Collieries Pty Ltd
Recitals	This document has been prepared on behalf of Tahmoor Coal Pty Ltd and Bargo Collieries Pty Ltd. The following recitals pertain to documents for which Bargo Collieries is a signatory for any activities listed in clause 27 of the Mining Regulations (and relating to CCL747): A. Bargo Collieries Pty Ltd (Bargo Collieries) is the holder of Consolidated Coal Lease 747 (CCL 747). B. Mining in part of the approved Tahmoor South Coal Mine Project will take place within land covered by CCL 747 C. The development consent No. SSD8445 for the Tahmoor South Coal Mine Project was obtained by Tahmoor Coal Pty Ltd which is a related entity to Bargo Collieries.
Water licence #	WAL 36442, WAL 25777, WAL 43631, WAL 43655, WAL 43656, WAL 43657, WAL 43659, WAL 45204, SWC880938 (Leased), SWC884296 (Leased)
Name of holder of water licence	Tahmoor Coal Pty Ltd Bargo Collieries Pty Ltd (WAL 25777)
RMP Start Date	02/07/2022
RMP End Date	31/12/2033
Annual Review start date	01/01/2025
Annual Review end date	31/12/2025
I, Amanda Bateman, certify that this audit report is a true and accurate record of the compliance status of Tahmoor Mine for the period 1 January 2025 and 31 December 2025 and that I am authorised to make this statement on behalf of Tahmoor 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	**Amanda Bateman**

Title of authorised reporting officer	**Environment and Community Manager**
Signature of authorised reporting officer	
Date	31/10/2026

2 Statement of Compliance

Table 2-1 outlines the statement of compliance with the relevant conditions for the reporting period.

Table 2-2 provides a statement of compliance for Tahmoor Coal for 2025.

Table 2-1 Statement of Compliance (2025)

Were all the conditions of the relevant approvals complied with?	Compliance
ML1376	Yes
ML1308	Yes
ML1539	Yes
ML1642	Yes
CCL716	Yes
CCL747	Yes
EPL 1389	No (refer to Section 8.2.2)
WAL36442	Yes
WAL25777	Yes
WAL43631	Yes
WAL43655	Yes
WAL43656	Yes
WAL43657	Yes
WAL43659	Yes
WAL45204	Yes
SWC880938 (Leased)	Yes
SWC884296 (Leased)	Yes
DA 1975	Yes
DA 1979	Yes
DA 190/85	Yes
DA 57/93	Yes
DA 67/98	Yes
SSD 8445	No (please see below, Table 2-2)
EPBC 2017/8084	Yes

Table 2-2 Non-Compliance Summary (2025)

Relevant Approval	Condition #	Condition Description (summary)	Compliance status	Comment	Section addressed in Annual Review
SSD 8445	C8 (g) (iii)	Monthly surface water monitoring is to be conducted in accordance with the approved Water Management Plan	Non-Compliant	Monitoring was not undertaken due to a contractual dispute for the month of February 2025. Monitoring was re-instated the following month.	Section 12.8
SSD 8445	C8 (g) (iii)	Monthly groundwater monitoring is to be conducted in accordance with the approved Water Management Plan	Non-Compliant	Monitoring was not undertaken due to a contractual dispute for the month of April 2025. Monitoring was re-instated the following month.	Section 12.9
SSD 8445	B18 (c) (i)	Quarterly Hi Volume Dust Monitoring is to be undertaken in accordance with the approved Air Quality and Greenhouse Gas Management Plan	Non-Compliant	Monitoring was not undertaken due to a contractual dispute during Q1 2025. Monitoring was re-instated the following quarter.	Section 8.2.2
EPL1389					
SSD 8445	C8 (g) (iii)	Monthly groundwater monitoring is to be conducted in accordance with the approved Water Management Plan	Non-Compliant	Monitoring was not undertaken due to a contractual dispute for the month of September. Monitoring was re-instated the following month.	Section 12.9
SSD 8445	B5 (f)	Carry out regular attended Noise monitoring.	Non-Compliant	Monitoring was not undertaken due to a contractual dispute for Q3 2025. Monitoring was re-instated the following quarter.	Section 6 and Section 7.2
SSD 8445	C8 (g) (iii)	Monthly surface water monitoring is to be conducted in accordance with the approved Water Management Plan	Non-Compliant	Monitoring was not undertaken due to a contractual dispute for the month of December 2025. Monitoring was re-instated the following month.	Section 12.8

SSD 8445	B38 (g)	Bi-annual monitoring in accordance with the approved Biodiversity Management Plan	Non-Compliant	Monitoring was not undertaken due to a contractual dispute for the Spring 2025 season. Monitoring was re-instated the following season.	Section 12.4

Table 2-3 Compliance status key to Table 2-2 Non-Compliance summary

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)

2.1 Tri-ennial Independent Audit

The next Triennial Independent Environmental Audit will be undertaken during October 2026 in accordance with Conditions 50 and E15 of Development Consent DA 67/98 and SSD 8445 respectively.

3 Introduction

3.1 Background

Tahmoor Coal Mine (Tahmoor Mine) is an underground coal mine located approximately 80 kilometres (km) south-west of Sydney between the towns of Tahmoor and Bargo, New South Wales (NSW). Tahmoor Coal, as the operator of Tahmoor Mine, is approved to extract up to 4 million tonnes of Run of Mine (ROM) coal per annum from the Bulli Coal Seam. Tahmoor Mine produces a primary hard coking coal product and a secondary higher ash coking coal product that are used predominantly for coke manufacture for steel production. Product coal is transported via rail to Port Kembla and Newcastle for Australian domestic customers and export customers.

Tahmoor Mine has been operated by Tahmoor Coal Pty Ltd (Tahmoor Coal) since the mine commenced in 1979 using bord and pillar mining methods, and via longwall mining methods since 1987. Tahmoor Coal is a wholly owned entity within the Liberty Primary Metals Australia division of the GFG Alliance group.

In April 2021, Tahmoor Coal received Development Application Approval (SSD 8445) for the extraction of up to 4 Mtpa of ROM coal in the 'Tahmoor South Domain', with a total of up to around 33 Mt of ROM coal proposed to be extracted over a 10-year period. Tahmoor Coal also received conditions of approval (EPBC 2017/8084) under the *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth) in October 2021.

In May 2024, a modification (Mod 3) was submitted to the Department of Planning, Housing and Infrastructure (DPHI) for the extraction of one additional longwall LW S7A which was approved in May 2025. A maximum of 35 Mt of ROM coal to be extracted over the life of the development was approved under Mod 3 until 31 December 2033.

OVERVIEW OF OPERATIONS

Tahmoor Coal has previously mined 36 longwalls to the north and west of the mine's current pit top location and is currently mining in the Tahmoor South Domain. The Tahmoor South Domain is located south of the Bargo River and east of Remembrance Driveway and north-east of the township of Bargo. Longwall mining is used to extract coal from the Bulli coal seam within the bounds of Consolidated Coal Lease (CCL) 716 and CCL 747. Thirteen longwalls are approved in this domain which are divided into a series of seven northern (A series) and six southern (B series) longwalls. An Extraction Plan for the A series, Longwalls' South 1A to South 6A (LW S1A-S6A) was approved on 20 September 2022; noting Longwall South 7A (LW S7A) Extraction Plan approval was granted in January 2026. The first longwall (LW S1A) was completed in July 2023, the second longwall (LW S2A) was completed in April 2024, and the third longwall (LW S3A) was completed in December 2024.

With regards to this Annual Review, the Department of Planning, Housing and Infrastructure (DPHI) and the Department of Regional NSW – Resources Regulator (Resources Regulator) approved that the Annual Review prepared under Condition 45 of Development Consent DA 67/98 can also fulfil the requirement of the Annual Environmental Management Report (AEMR). This was to reduce duplication of reported information to both Government authorities.

In addition, Mining Lease 1376 was varied on the 17 October 2022 and excludes the need to include a Rehabilitation Report as part of the Annual Review report as this was replaced with the reporting required for the Resources Regulator new rehabilitation reforms. The Commonwealth Department

of Climate Change, Energy, the Environment and Water (Cth DCCEEW) also confirmed on 16 June 2022 that the Annual Compliance Reports requirement will align with the due date of this report (31 March annually), and these reporting requirements will be covered off in this report.

This Annual Review or Annual Environmental Management Report (AEMR) covers the reporting period of 1 January 2025 to 31 December 2025. DPHI approved the revised submission date of this report from 31 March 2026 to 31 October 2026 on 30 March 2026.

Tahmoor Coal received approval to align its reporting period for the Rehabilitation Reforms Annual Rehabilitation Report and Forward program with the AEMR reporting period in order to streamline reporting.

A plan of Tahmoor Mine showing the regional context, development consent boundary and mining lease boundaries is shown in **Figure 3-1**.

Contact information for Tahmoor Coal is listed in **Table 3-1** below.

Table 3-1 Tahmoor Coal Contacts

Name	Position	Contact details
Peter Vale	Executive General Manager Coal Operations	(02) 4640 0100
Clint Mason	Head of Tahmoor Coal Operations	(02) 4640 0150
Amanda Bateman	Environment & Community Manager	(02) 4640 0025
Ross Barber	Project Manager Subsidence	(02) 4640 0028
Natalie Brumby	Environmental Specialist	(02) 4640 0048
24 Hour Contact Number	Community Call Line	1800 154 415

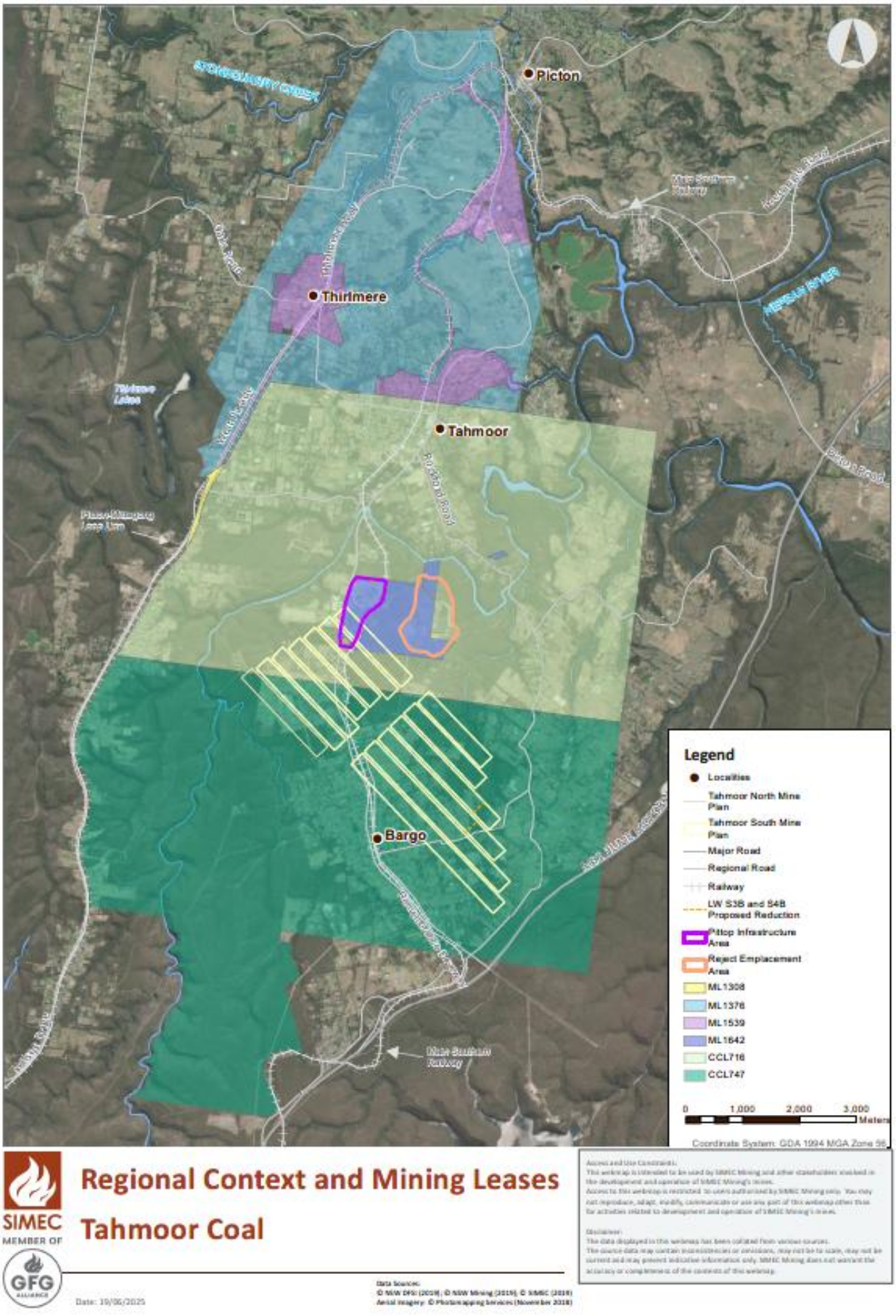


Figure 3-1 Mining Area and Tenure

4 Approvals

Development consents, mining tenures and environmental licences held by Tahmoor Coal Pty Ltd and Bargo Collieries Pty Ltd are outlined in **Table 4-1** below.

Table 4-1 Consents and Licences

Consent Number	Consent Description	Date Granted	Expiry Date
Development Consents			
DA 1975	Underground Mine	26/03/1975	No expiry
DA 162/76	Bargo Consent	21/04/1976	This Consent was surrendered on 05/10/2022
DA 1979	Coal Preparation Plant Stockpiles and Refuse Emplacement Area	23/08/1979	No expiry
DA 1979 (Mod 1)	Modification for road haulage of trial coal shipments	16/09/1985	No expiry
DA 190/85	Surface Works for Gas Extraction	16/12/1985	No expiry
DA 1979 (Mod 2)	Modification for Upgrades for Longwall Mining	05/11/1986	No expiry
DA 1979 (Mod 3)	Modification for Road haulage in Wollondilly Shire and when rail unavailable	1988	No expiry
DA 1979 (Mod 4)	Modification for Road haulage to Corrimal and Coal Cliff Coke Works	13/12/1994	No expiry
DA 57/93	Tahmoor North Project	07/09/1994	No expiry
DA 57/93 (Mod 1)	Modification for heritage approval condition	07/06/2007	No expiry
DA 67/98	Tahmoor North Extension Project	25/02/1999	The approval for extraction of coal expired on 16/06/2024
DA 67/98 (Mod 1)	Modification for additional areas to be subsided	26/11/2006	As above
DA 67/98 (Mod 2)	Modification for Redbank Tunnel Subsidence Management	08/04/2012	As above
DA 67/98 (Mod 3)	Modification for Redbank Tunnel Rail Deviation –Subdivision of Land	25/11/2012	As above
DA 67/98 (Mod 4)	Modification for subsidence area update	15/10/2018	As above
DA 67/98 (Mod 5)	Modification for subsidence area update	03/11/2020	As above
SSD 8445	Tahmoor South Project	23/04/2021	31/12/2033
SSD 8445 (MOD 1)	Extension of time to commission Water Treatment Plant	19/07/2022	As above
SSD 8445 (MOD 2)	Underground brine disposal and transfer of mine water	13/06/2023	As above

Consent Number	Consent Description	Date Granted	Expiry Date
SSD 8445 (MOD 3)	Additional Longwall LWS7A	27/05/2025	As Above
EPBC 2017/8084	Conditions of approval under the *Environment Protection and Biodiversity Conservation Act 1999*	01/10/2021	01/09/2061
Mining Tenure – Mining Leases & Exploration Authorisations			
Consolidated Coal Lease 716	Tahmoor Mining Lease	15/06/1990, renewed 16/08/2023	13/03/2042
Mining Lease 1376	Tahmoor North Mining Lease	28/08/1995, renewed 28/03/2023	28/08/2043
Mining Lease 1308	Mining Lease to west of CCL716	02/03/2014	02/03/2035
Mining Lease 1539	Tahmoor North Extension Mining Lease	16/06/2003	16/06/2035
Mining Lease 1642	Pit-top and REA surface Mining Lease	27/08/2010	27/08/2031
Consolidated Coal Lease 747	Bargo Mining Leases	23/05/1990, renewed 14/05/2025	06/11/2046
Environmental Licences			
EPL 1389	Environmental Protection Licence	01/05/1994, latest variation 09/06/2026	No expiry
WAL36442	Water Access Licence	06/12/2013	No expiry
WAL25777	Water Access Licence	27/10/2014	No expiry
WAL43631	Water Access Licence	08/03/2021	No expiry
WAL43655	Water Access Licence	09/03/2021	No expiry
WAL43656	Water Access Licence	01/08/2022	No expiry
WAL43657	Water Access Licence	09/03/2021	No expiry
WAL43659	Water Access Licence	09/03/2021	No expiry
WAL45204	Water Access Licence	07/08/2024	No expiry
SWC884296	Water Access Licence (Lease)	22/07/2026	1/7/2027
SWC880938	Water Access Licence (Lease)	01/07/2025	30/06/2026
XSTR200005	Licence to store explosives	02/02/2017	02/02/2027
5061521	Radiation Management Licence	29/10/2025	29/10/2026

5 Operations Summary

5.1 Mining Operations

Mining activities during the reporting period have been conducted in accordance with the Rehabilitation Management Plan and Extraction Plan approvals. An Extraction Plan for Longwalls South 1A to South 6A was approved on 20 September 2022.

The dates for mining in the Tahmoor South domain "A series" is given below in **Table 5-1** and longwall layout is given in **Figure 5-1**.

Table 5-1 A-Series Longwall Mining Schedule

Longwall Block	Proposed Start	Proposed Completion (subject to change)
Tahmoor South – Longwall S1A	19/10/2022 (actual)	18/06/2023 (actual)
Tahmoor South – Longwall S2A	02/08/2023 (actual)	06/04/2024 (actual)
Tahmoor South – Longwall S3A*	08/05/2024 (actual)	17/12/2024 (actual)
Tahmoor South – Longwall S4A*	December 2026	August 2027
Tahmoor South – Longwall S5A	September 2027	May 2028
Tahmoor South – Longwall S6A	June 2028	January 2029
Tahmoor South – Longwall S7A	February 2029	August 2029

* LW S3A and LW S4A were shortened by 104m from the initial start position with approval from relevant stakeholders.

Tahmoor Coal wrote to DPHI in July 2023, initiating the process of lodging a Modification to SSD8445 (Mod 3) to seek an additional Longwall in the 'A series', ie. LWS7A. Mod 3 was lodged in May 2024 and approved in May 2025. LW S7A is planned to be extracted after completion of LW S6A, noting LW S7A Extraction Plan approval was granted in January 2026.

An exploration program commenced in July 2024 consisting of drilling and investigation of up to 9 boreholes in the Tahmoor South-West area. Two boreholes were drilled and rehabilitated, and the project was put on hold in October 2024 and expected to resume during 2028.

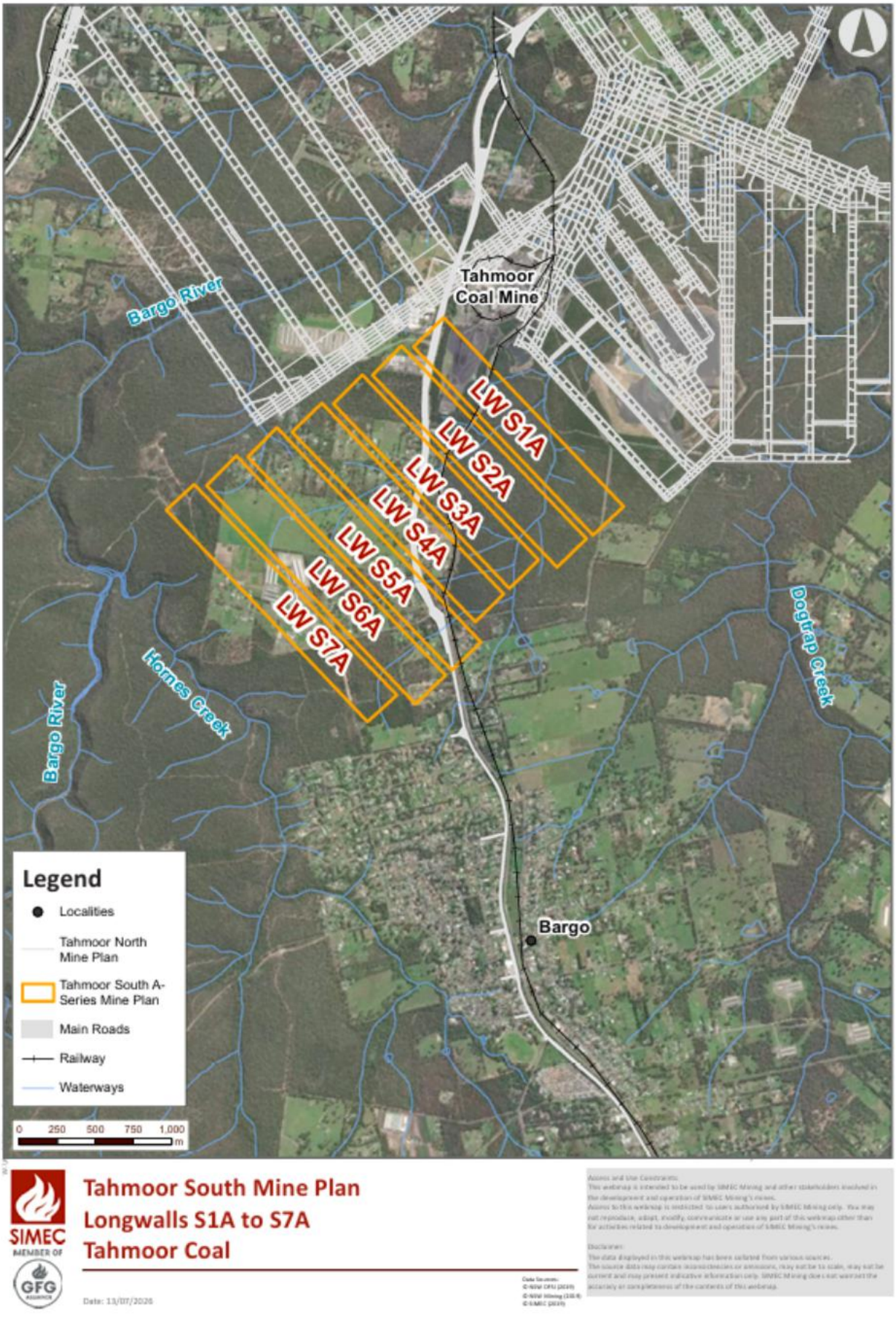


Figure 5-1 Tahmoor South Domain A-Series Longwalls

Table 5-2 outlines a summary of operational performance at Tahmoor Mine.

Table 5-2 Production Summary

Material	Approved Limit (Specify Source)	Previous Reporting Period (2024) (Actual)	This Reporting Period (2025) (Actual)	Next Reporting Period (2026) (Forecast)
Waste rock/Overburden /Oversize Tonnes	Maximum of 200,000 tonnes of material transported to and from site each year (SSD 8445)	2,716	0	-
ROM Feed Tonnes	4,000,000 tonnes (SSD 8445)	2,998,583	12,117	260,388
Refuse Tonnes	-	1,331,540	54,503	112,467
Fine Refuse (Tailings) Tonnes	-	182,995	8,700	15,183
Saleable Product Tonnes	3,500,000 tonnes (EPL 1389)	1,646,540	132,700	139,757

5.2 Actions Required from Previous 2024 Annual Review

As required under Schedule 2 Condition 52 of Development Consent DA 67/98 and Schedule 2 Condition E23 of the Development Consent SSD 8445, a copy of the 2024 Annual Review Report was made available on the Tahmoor Coal Website following submission on 30 September 2025 and can be found at: Annual Environmental Management Reports - Tahmoor Colliery.

In accordance with Schedule 2 Condition 46 of the Development Consent DA 67/98 and Schedule 2 Condition E7 of Consent SSD8445, the related Management Plans were reviewed and updated where required following the submission of the AEMR. Approved updates of these documents have been posted on the Tahmoor Coal Website.

Following submission of the 2024 Annual Review, comments received from Department of Primary, Housing and Industries (DPHI) on 4 November 2025, included updating the 2024 Annual Review references to Depositional Dust monitoring sites in Sections 6 and 8. The 2024 Annual Review was updated to include these commitments and uploaded to the Tahmoor Coal website within 30 days. Refer to **Table 5-3** below for additional information.

No further actions were required from stakeholders for the 2024 Annual Review Report.

Table 5-3 Actions from previous Annual Review

Action required from previous Annual Review	Requested by	Action taken by the Operator	Where discussed in Annual Review
Review and update references to Depositional Dust sites in Sections 6 and 8.	Department of Planning, Housing and Infrastructure (DPHI)	Sections 6 and 8 updated.	Section 6 and 8.

6 Environmental Performance

Environmental performance and implemented and/or proposed management activities at Tahmoor Mine are outlined in **Table 6-1** below. Further details regarding environmental performance are given in **Sections 9** to **18**.

Table 6-1 Environmental Performance

Aspect	Approval Criteria/EIS Prediction	Performance during the Reporting Period	Trend/key management implications	Implemented / proposed management actions
Noise	SSD8445 Noise Assessment Criteria: Variable location criteria	The Q3 2025 Noise Assessment was not undertaken due to financial constraints.	Noise levels were generally compliant throughout the reporting year.	Continue regular monitoring of noise levels and continue implementation of noise mitigation activities
Blasting	Tahmoor Coal does not conduct surface blasting activities			
Air quality	Maximum deposited dust annual average of 4 g/m^2/month (DA 67/98 MOD5)	Monitoring results all within approved criteria.	Air quality levels within approved criteria	Continue regular monitoring of air quality levels
	Maximum increase in deposited dust level over an annual period of 2 g/m^2/month (DA 67/98 MOD5)	Monitoring results all within approved criteria	Air quality levels within approved criteria	Continue regular monitoring of air quality levels
	Maximum total suspended particulate (TSP) matter annual average of 90 µg/m^3 (DA 67/98 MOD3)	Monitoring results all within approved criteria	Air quality levels within approved criteria	Continue regular monitoring of air quality levels
	Maximum particulate matter (PM10) annual average of 25 µg/m^3 (SSD8445)	Monitoring results all within approved criteria	Air quality levels within approved criteria	Continue regular monitoring of air quality levels
	Maximum particulate matter (PM10) 24-hour average of 50 µg/m^3 (SSD8445)	Monitoring results all within approved criteria except a max of 50.64 µg/m^3 recorded in November 2025, not attributed to mining activities.	Air quality levels within approved criteria	Continue regular monitoring of air quality levels
	Maximum particulate matter (PM2.5) annual average of 8 µg/m^3 (SSD8445)	Monitoring results all within approved criteria	Air quality levels within approved criteria	Continue regular monitoring of air quality levels
	Maximum particulate matter (PM2.5) 24-hour average of 25 µg/m^3 (SSD8445)	Monitoring results all within approved criteria. Maximum 24hr average results exceeding 25 µg/m^3 were recorded at ADR1 and ADR2	Air quality levels within approved criteria	Continue regular monitoring of air quality levels

Aspect	Approval Criteria/EIS Prediction	Performance during the Reporting Period	Trend/key management implications	Implemented / proposed management actions
		monitors during March, April and July 2025, however not attributed to mining activities.		
Biodiversity	-	Monitoring results all within approved criteria for Aquatic Habitat and Macroinvertebrate, Amphibians populations, riparian vegetation and threatened species, threatened populations and endangered ecological communities.	N/A	Continue current management and monitoring activities
Heritage	-	Monitoring results all within approved criteria for Aboriginal and cultural Heritage sites and Historical Heritage items	N/A	Continue current management and monitoring activities
Water Quality	EPL 1389 Conditions	Monitoring results all within approved criteria	Water quality compliant with EPL	Construction of Water Treatment Plant completed December 2023. Commissioning continued for 2025. E3 Aquatic Health monitoring program continuing. Continue current management and monitoring activities.
Subsidence	Subsidence Management Plan and Extraction Plan approvals	Myrtle and Redbank Creek Remediation works completed in accordance with approvals	Subsidence monitoring results generally within predictions	Continue current management and monitoring activities.
	Subsidence Management Plan and Extraction Plan approvals	Subsidence monitoring results generally within predictions for Cliffs, Natural Steep slopes, Farm Dams and Agricultural Land.	Subsidence monitoring results generally within predictions	Continue current management and monitoring activities.
	Water Management Plan	Water Quality, Water Levels, Groundwater Pressure, Physical features and Natural Behaviour, Channel Stability, Sedimentation and Erosion.	Results within predictions	Continue current management and monitoring activities including implementation of TARPs

Aspect	Approval Criteria/EIS Prediction	Performance during the Reporting Period	Trend/key management implications	Implemented / proposed management actions
	Subsidence Management Plan and Extraction Plan approvals	Subsidence monitoring results generally within predictions for Railway track, Railway Culverts and Embankments, Cuttings, Bridges and Coal conveyor Crossing.	Subsidence monitoring results generally within predictions	Continue current management and monitoring activities.

7 Operational Noise

7.1 Environmental Management

Noise is managed across Tahmoor Mine in accordance with the approved Noise Management Plan (available on the Tahmoor Coal website), which has been prepared to address the requirements of Condition B7 of the SSD 8445 development consent for Tahmoor South. The management plan provides a framework for Tahmoor Coal personnel to ensure that compliance is achieved with relevant internal and external regulatory requirements related to noise management at Tahmoor Mine. The plan ensures that noise impacts on the community are minimised and managed efficiently and effectively within a structured framework.

In May 2024, the noise criteria of the 1994 consent was superseded by the noise criteria conditions provided with in the SSD 8445 consent.

Up until 16 May 2024, noise criteria stipulated in Conditions 73 and 74 (DA 57/93 Tahmoor North development consent) was as follows:

> *Condition 73: The noise level emanating from Tahmoor Mine and any associated facilities, including the Washery, stockpile area and rail loading facility, shall not exceed an L10 level of 45 dBA when measured within 3 m of any residence.*
>
> *Condition 74: The noise emanating from operations at the refuse emplacement site shall not exceed an L10 of 37 dBA or background +5 dBA whichever is the greater when measured within 3 m of any residence.*

The DA 57/93 consent conditions refer to a distance of three (3) metres (m) from any residence that was constructed or approved prior to 1994.

From 16 May 2024, noise criteria as listed below as per Condition B2 of consent SSD8445 and Table 2 of SSD8445:

> *B2: Within two years of the commencement of development, the Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 2 (of SSD8445) at any receiver on privately-owned land.*

Operator-attended noise monitoring locations around the mine are provided in **Figure 7-1**. These locations are representative of potentially impacted residences surrounding the Tahmoor Mine surface operations and generally consistent with historical noise compliance monitoring locations.

Tahmoor Coal operates a real-time noise monitoring system which includes a Trigger Action Response Plan (TARP) and alarm system, linked back to the mine's 24-hour control room.

Attended due diligence monitoring and assessment was conducted quarterly during the reporting period as part of ongoing noise compliance.

7.2 Environmental Performance

Tahmoor Mine's real-time noise monitoring data and due diligence assessments continued to demonstrate compliance with the sites' development consent noise criteria, with all monitoring results satisfying the noise assessment goals for the mine pit-top, No.2 ventilation shaft and REA operational areas with one non-compliance due to inability to conduct monitoring. The Q3 2025 Noise Assessment was unable to be completed due to financial constraints experienced by the

business at the time. This issue was amended for the Q4 2025 Noise Assessment to be undertaken. The non-compliance was reported to DPHI on 1 October 2025 and within the required 7 days after being made aware of a non-compliance.

Actions taken to address the non-compliance included the following:

- Escalated the resolution of the contractual dispute as a priority to senior management; and
- Payment plan arranged for Q4 2025 Noise Assessment to be undertaken without issue.

Figure 7-2 outlines the positions of the quarterly noise monitoring assessment locations and **Appendix 1** contains a summary of noise monitoring completed from 2014 to 2025.

Tahmoor Coal received zero (0) complaints in 2025 relating to noise and/or vibration. Further information regarding complaints is provided in **Section 20 Community**.

7.3 Further Improvements

Tahmoor Coal will continue to operate and monitor the sites real-time noise monitoring network and alarm system, which includes a monitor at the mine pit-top facility (SX48) and one at a residence along Olive Lane (SX47) (refer to **Figure 7-2**). The site also hosts an additional portable noise monitor which is utilised at times to investigate off site noise issues, SX25. This noise monitor is usually situated to the north of the stockpile area and is kept active and can be utilised as an additional onsite noise monitor however during 2025 the monitor was located at the REA to monitor noise and differences in weather conditions.

As part of the Tahmoor South consent SSD 8445 and to comply with Condition B2, Tahmoor Coal implemented several significant and capital-intensive noise mitigation measures to reduce the impact of noise from the mine site activities as follows:

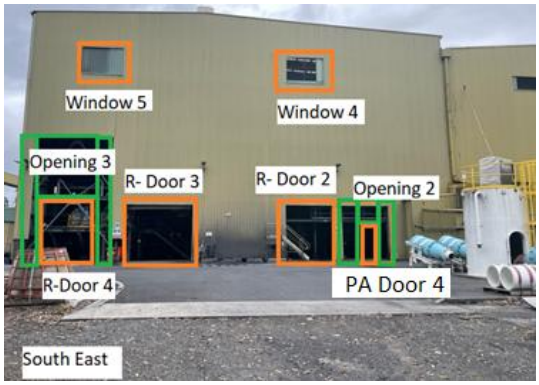
Noise mitigation works completed on the Coal Handling Preparation Plant (CHPP) include:

1. Installation of acoustic cladding;
2. Installation of acoustic roller doors; and
3. Fitting of noise reduction material to windows.

Additional noise mitigation works that have been undertaken across site include the following:

1. Dozer sound suppression kits;
2. Stockpile extension for increased operation on the Eastern Side;
3. Refuse Haul Truck fitted with new automatic transmission motor and upgraded sound kit;
4. 3C to 4C Transfer building doors; and
5. Double cladding of refuse bin.

Please see **Figure 7-1** below for CHPP identified areas mitigated (top-left), Noise Cladding material used (top-right) and CHPP noise mitigation works at time of installation (bottom).



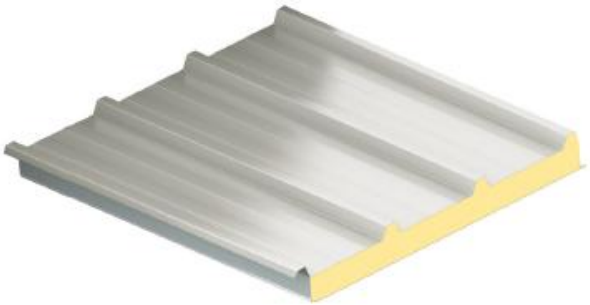




Figure 7-1 Images of Noise Cladding installed for the CHPP Building

Tahmoor Coal will continue to operate and monitor the sites noise levels in accordance with the approved Noise Management Plan.

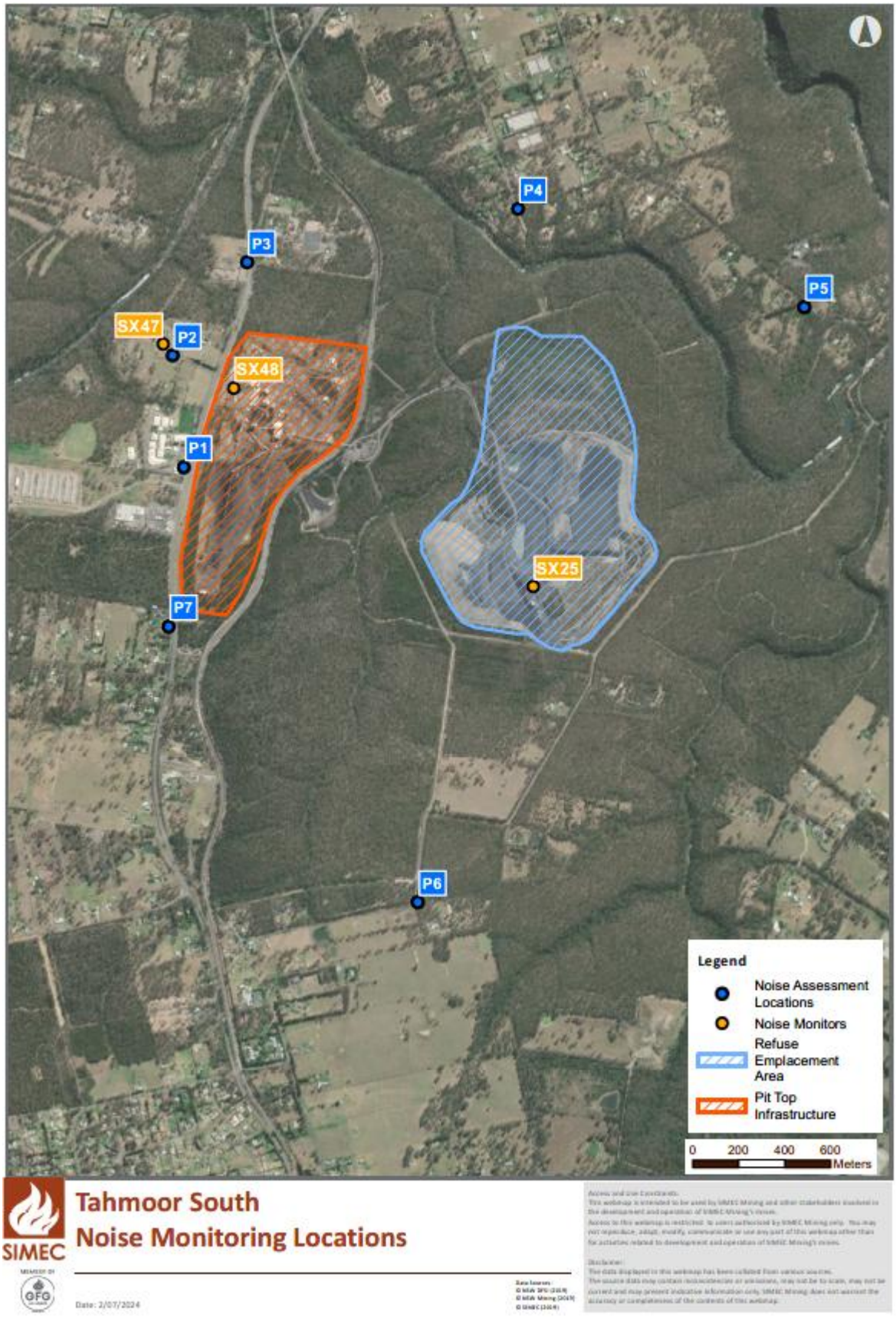


Figure 7-2 Locations of Noise Monitors and Noise Assessment Locations

8 Air Quality

8.1 Environmental Management

Air quality is managed in accordance with the approved Air Quality and Greenhouse Gas Management Plan (available on the Tahmoor Coal website), which has been prepared to address the requirements of Condition B7 of the SSD 8445 development consent for Tahmoor South. The management plan provides a framework for Tahmoor Coal personnel to ensure that compliance is achieved with relevant internal and external regulatory requirements related to air quality management at Tahmoor Mine.

A comprehensive system of controls is detailed for managing particulate matter on-site, including dust suppression sprays on the coal stockpiles (automatically triggered by pre-defined meteorological conditions), and visual triggers for operators and site personnel. Water carts are used at the REA and Pit-top hardstand areas to reduce wheel generated dust from mobile equipment. Unsealed access ways are controlled through the daily and additional on-call deployment of water carts to control dust. An organic dust suppressant 'Dustloc' is mixed into the water carts for additional effectiveness, and an Early Warning Network (EWN) was implemented during the last reporting period to create a daily awareness on site of potential dust enhancing conditions and influence work activities on site.

8.2 Environmental Performance

8.2.1 Depositional Dust

The depositional dust monitoring results for the reporting period, expressed as insoluble solids (g/m^2/month), are compared against those from previous reporting periods and reviewed monthly. Monitoring results indicate that all recorded dust levels were monitored in accordance with Tahmoor Coal's Environmental Protection Licence (EPL) and were within the annual average of 4 g/m^2/month and were within the maximum increase in deposited dust level over an annual period of 2 g/m^2/month as allowed by consent DA 67/98. The annual average for all Depositional Dust Monitoring Gauges was 0.79 g/m^2/month for the reporting period, which has decreased slightly from 0.98 g/m^2/month from the previous reporting period.

Depositional dust results during the reporting period are outlined in **Table 8-1** and **Figure 8-1** and have remained comparatively similar when compared to results of the last reporting period.

Air quality monitoring site locations are shown in **Figure 8-6.**

Table 8-1 Depositional Dust Gauge Data

Month/Site	1	2	3	4	7	8	9	10	11	12
EPL Monitoring site	DDG1	DDG2	DDG3	DDG4	DDG7	DDG8				
Jan-25	0.5	1.8	1.9	1.6	1.6	1.6	1.1	0.6	0.8	2.1
Feb-25	0.4	1.1	0.6	0.5	0.4	0.7	0.4	1.4	0.6	0.8
Mar-25	0.5	0.8	1.0	0.2	0.4	0.8	0.6	1.3	0.9	1.2
Apr-25	0.3	0.2	0.7	0.2	0.1	0.3	0.1	1.1	1.9	0.5
May-25	0.3	0.5	2.0	0.3	0.5	0.6	0.2	1.0	0.4	0.2
Jun-25	0.4	0.2	1.0	0.3	0.1	0.2	0.1	1.0	1.1	0.1
Jul-25	0.2	0.6	0.8	0.3	0.4	0.9	1.2	3.6	1.4	No access
Aug-25	0.2	0.3	0.9	0.1	<0.1	0.5	2.8	2.3	0.2	0.3
Sep-25	0.2	0.5	2.4	0.3	0.4	0.7	1.4	2.0	1.7	0.2
Oct-25	0.3	0.5	0.6	2.3	0.4	0.6	0.9	0.5	0.4	0.2
Nov-25	0.4	0.6	0.4	0.9	0.2	0.8	0.4	1.7	0.5	0.5
Dec-25	0.5	1.3	0.5	0.9	1.2	0.7	0.4	2.0	0.6	0.7

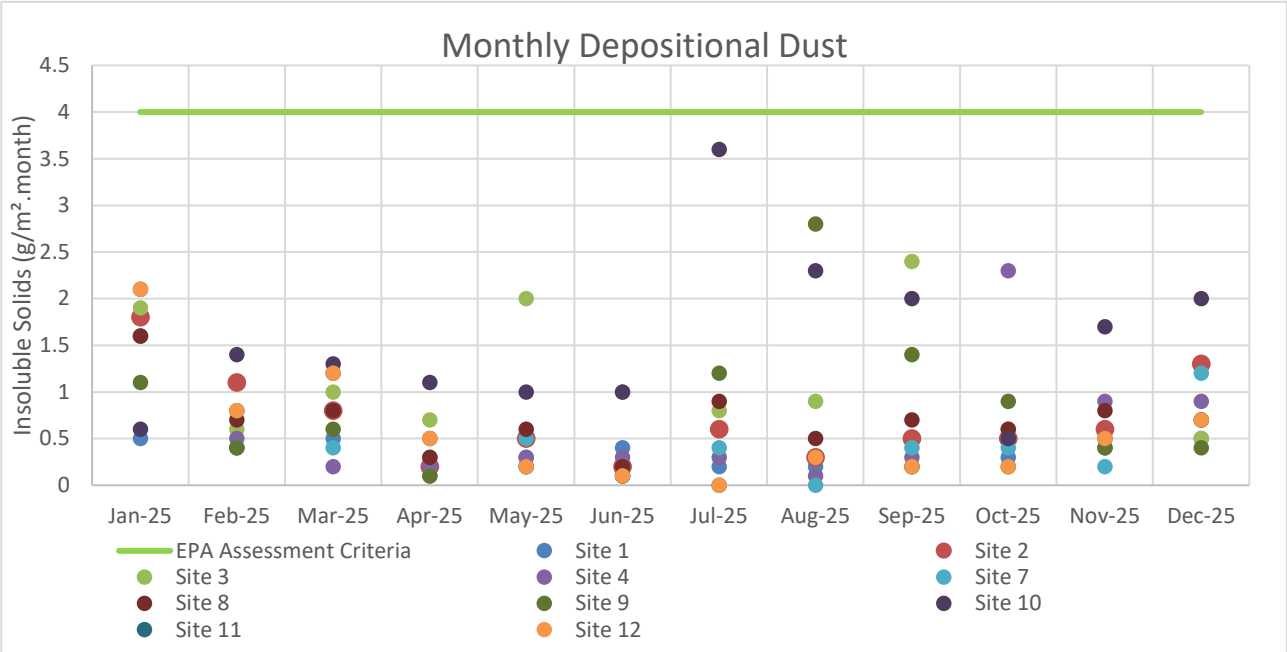


Figure 8-1: Depositional Dust monitoring for current reporting period (2025)

Figure 8-1 illustrates all sites are in accordance with Tahmoor Coal's Environmental Protection Licence (EPL) and within the annual average of 4 g/m^2/month as allowed by consent DA 67/98. In general, all Depositional Dust monitoring site levels recorded and annual average between 0.4 to 1.5g/m^2/month with an annual average for all sites of 0.79g/m^2/month for 2025.

Figure 8-2 illustrates the historical annual average of each site over the past 16 years.

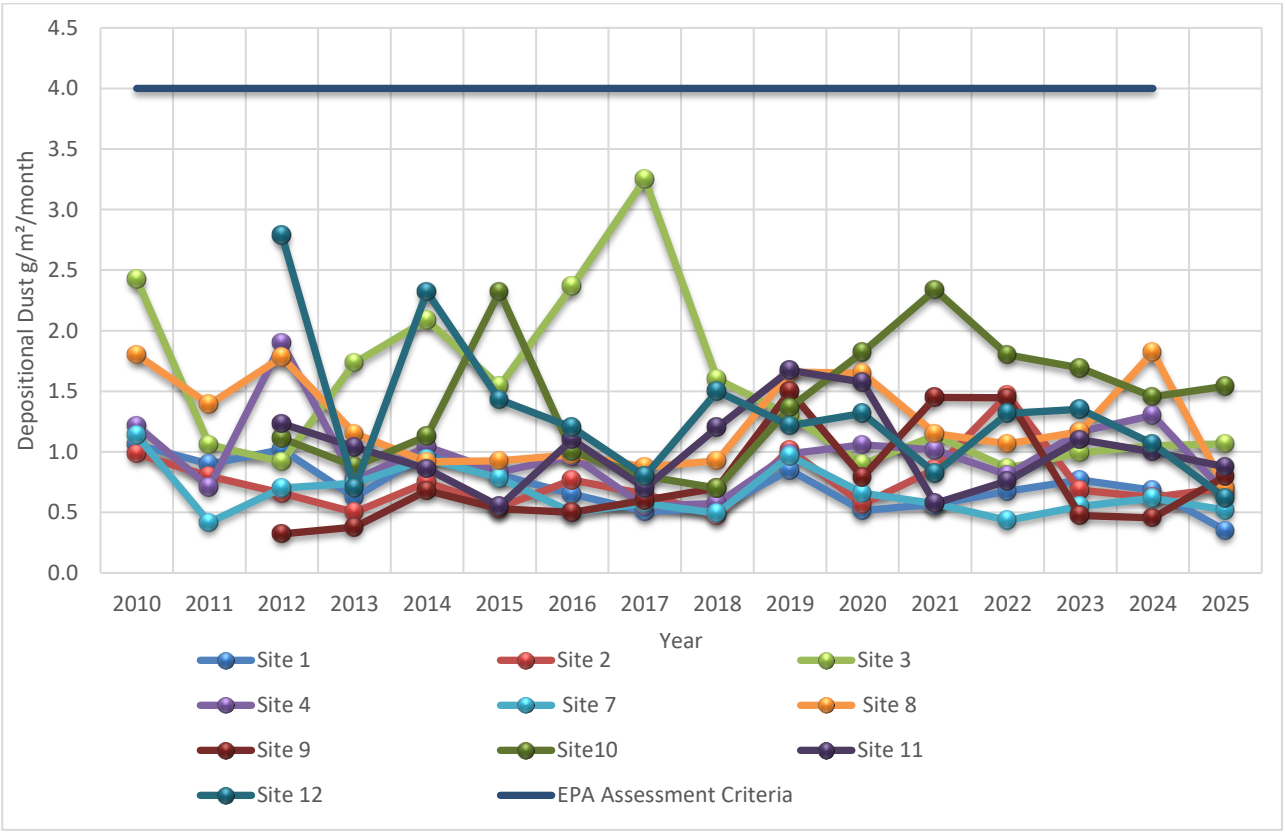


Figure 8-2 Depositional Dust Monitoring Annual Average Comparison

8.2.2 Continuous and Hi Vol Dust Monitoring

Figure 8-3 and **Figure 8-4** demonstrate the results of the particulate matter (PM_{10}) monitoring at Charlies Point Road and quarterly High Volume (Hi Vol) dust monitoring at Olive Lane and Hodgson Grove in Tahmoor located to the North-east and west of the pit-top facilities. PM_{10} particles have a diameter of 10 micrometers or smaller and are found in dust and smoke as a common air pollutant. These monitoring sites have been established since August 2013, with a continuous TEOM (Tapered Element Oscillating Microbalance) dust monitor located at Tahmoor Coal's Charlies Point Road property.

During the reporting period, PM_{10} results from Tahmoor Coal's TEOM have remained low and well below the 24 hour maximum average level of 50 µg/m³ and below the maximum PM_{10} annual average of 25 µg/m³ as allowable by development consent SSD8445 (refer to **Figure 8-4)**.

High Volume monitoring conducted quarterly during the reporting period has also remained below the 24-hour maximum average level of 50 µg/m³ as allowable by development consent SSD8445 (refer to **Figure 8-3**). Q1 2025 High Volume monitoring was not undertaken due to a contractual dispute, however monitoring resumed for Q2 2025.

As shown in **Figure 8-3 and 8-4**, bushfires and hazard reduction burns impacted on the air quality significantly during November and December 2019 causing a steep increase in the PM_{10} annual average. However, during 2020 levels considerably declined and returned to baseline levels during 2021. **Figure 8-4** shows a very similar annual average to last reporting period.

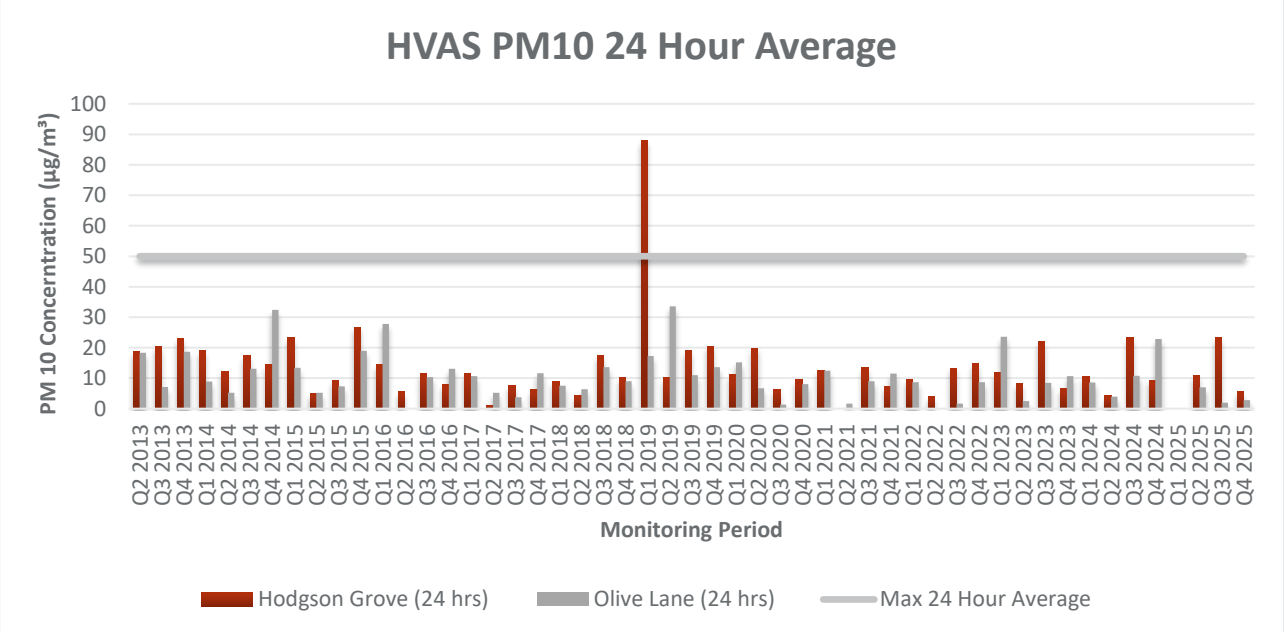


Figure 8-3 Air Quality monitoring results for PM10 from 24hr High Volume dust monitors located at Olive Lane and Hodgson Grove.

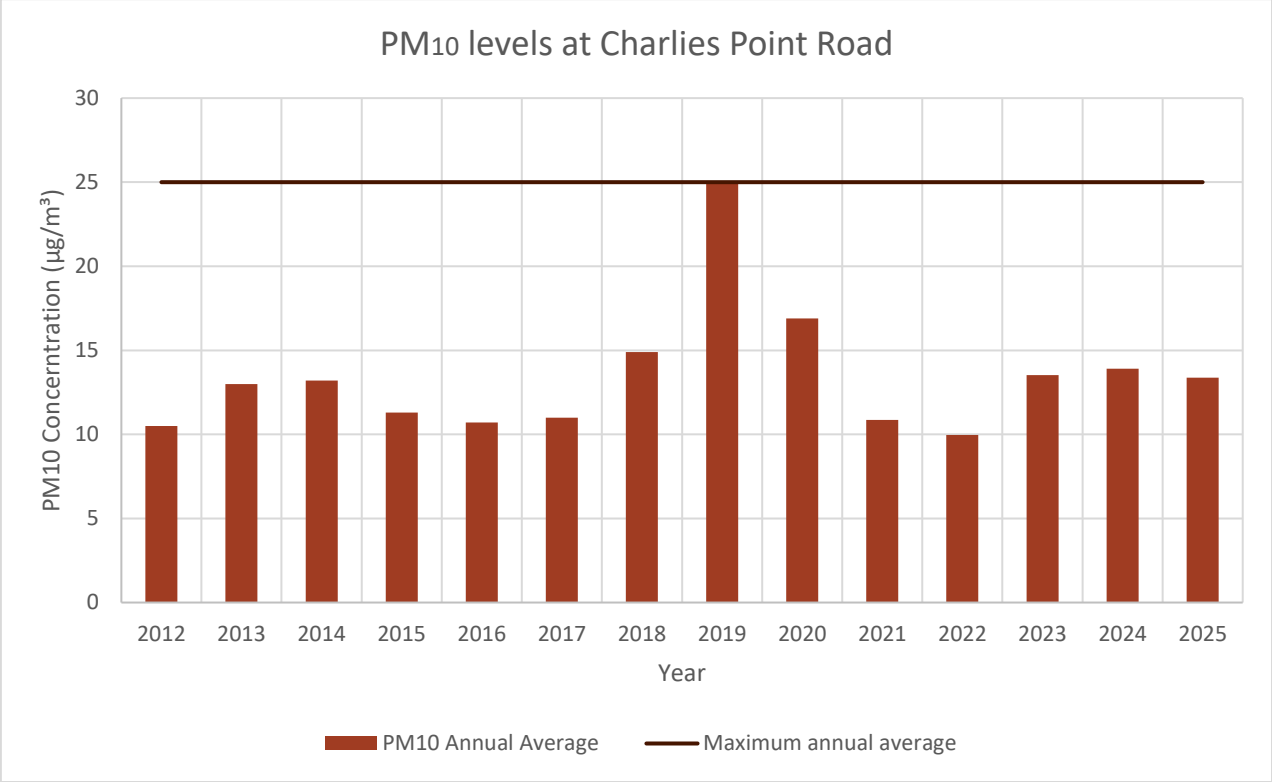


Figure 8-4 Continuous PM10 annual average results from Charlies Point Road TEOM dust monitor.

8.2.3 Total Suspended Particulate

Total suspended particulate (TSP) refers to the totality of small solid matter released, documented and/or otherwise observed in the atmosphere. TSP is sampled every 6 days by a third-party contractor and sent to a laboratory for analysis. The TSP gauge is located on a mine owned property south of the REA with the TEOM monitoring station on Charlies Point Road. The below data in **Table 8-2** was captured for the reporting period and recorded an average annual concentration of 15.39 µg/m^3, this has decreased from the previous reporting period average of 16.59 µg/m^3 for 2024 (refer to **Figure 8-5**) and is within the 90 µg/m^3 annual average as stated in Condition 37, DA 67/98.

Table 8-2 Total Suspended Particulates recorded for 2025.

2025	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
Jan	15.9	18.1	11.7	9.5	18.5	*
Feb	23.4	12.4	11.6	13.4	*	*
Mar	35.0	9.6	20.2	33.0	13.7	5.1
Apr	20.0	24.9	11.5	8.1	1.8	*
May	9.1	4.2	1.6	9.1	12.4	*
June	7.2	2.6	9.1	18.5	15.8	*
July	19.3	4.5	7.2	7.0	4.0	*
Aug	6.9	5.3	11.9	17.6	8.2	*
Sept	8.4	12.0	17.6	9.5	26.0	*
Oct	13.4	15.1	21.6	32.5	9.8	*

Nov	11.8	29.5	33.2	29.1	53.4	*
Dec	11.2	48.4	15.8	15.1	10.7	*

*Sample not required in this month

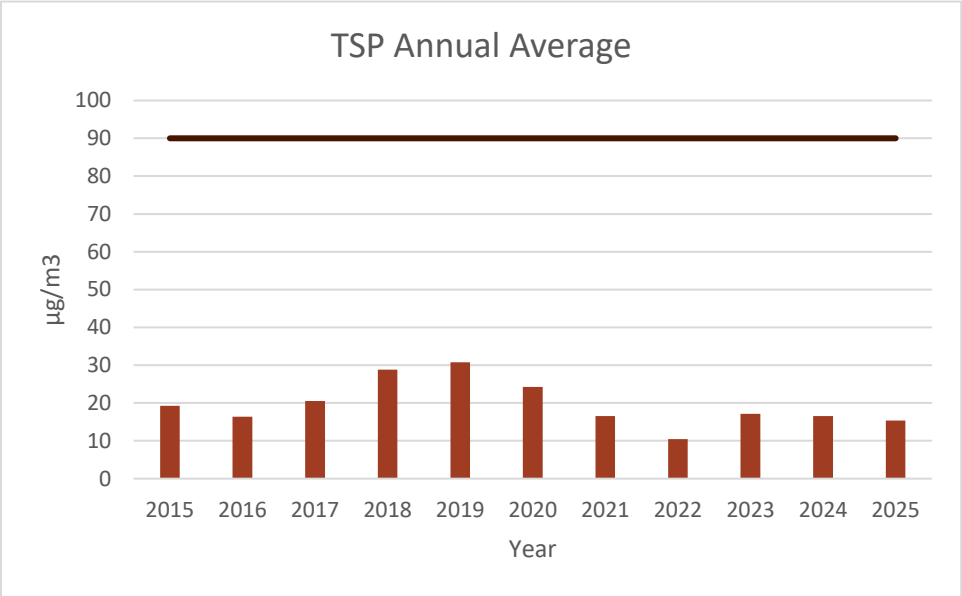


Figure 8-5 Total Suspended Particulates Annual Average from 2015 to 2025.

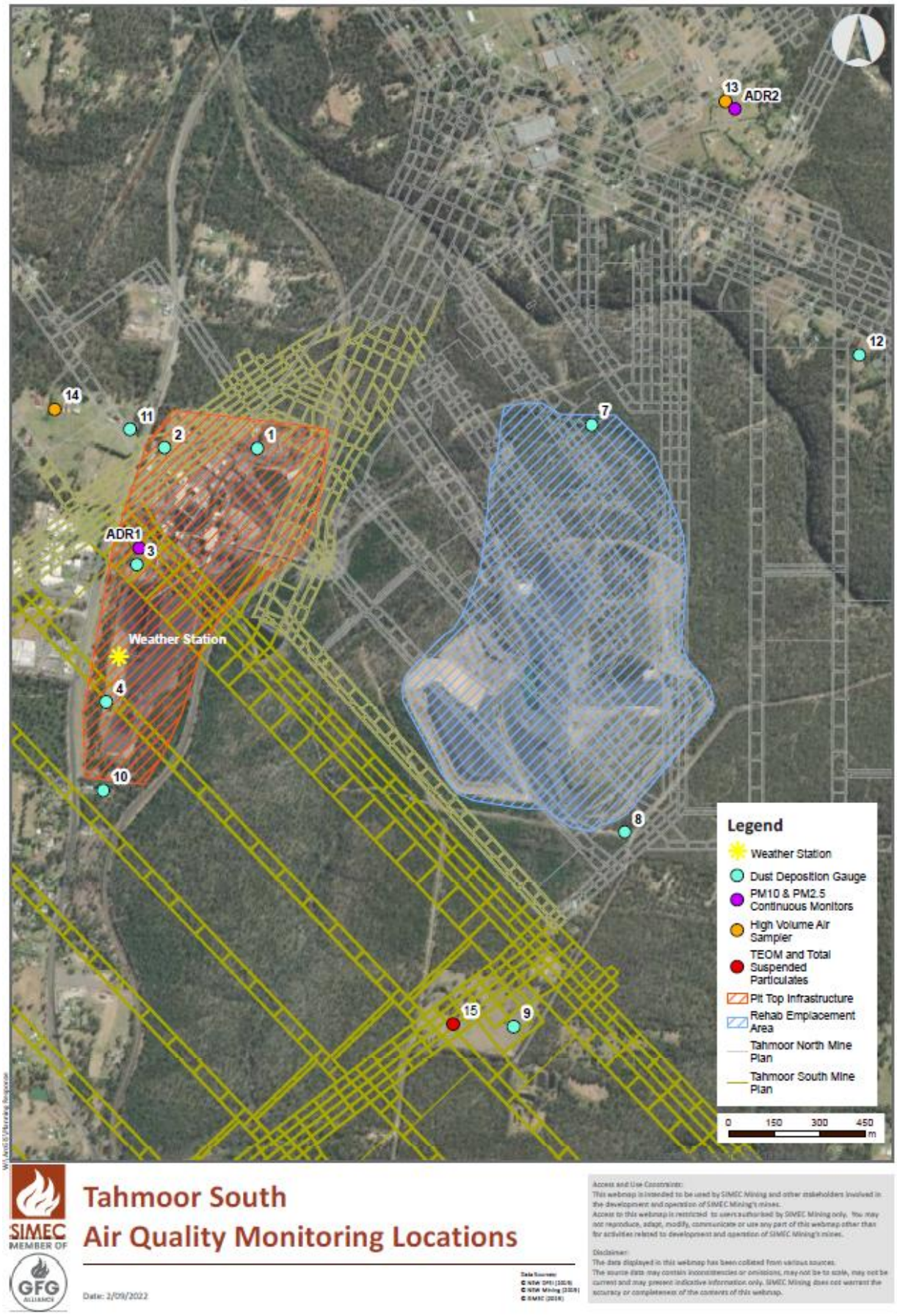


Figure 8-6 Tahmoor South Air Quality monitoring locations

8.2.4 Greenhouse Gas Emissions

Greenhouse gas emissions (GHG) are recorded every six (6) months and reported every twelve (12) months in the National Greenhouse and Energy Reporting (NGERS) scheme as a requirement under the National Greenhouse and Energy Reporting Act 2007 (NGER Act). NGER provides information about GHG emissions, energy production and energy consumption. Tahmoor Coal NGER Reports can be accessed via the Tahmoor Coal website here Tahmoor Colliery – Tahmoor Coking (metallurgical) Mine.

Carbon Dioxide Emissions (CO2-e) for the Financial Year 2025 and previous years are shown in **Table 8-3** below, as well as further explanation of the data.

Table 8-3 Annual Greenhouse Gas Emissions for Financial Year

Year	Scope 1 (Mt CO2-e)	Scope 2 (Mt CO2-e)	Total Scope 1+2 (Mt CO2-e)	Explanation for results
FY16	1.643	0.085	1.727	Finished Longwall LW29 and commenced LW 30. A 78 day changeout between longwalls occurred versus a budget of 28 days. The cause of delays included 12 days lost due to surface dam subsidence risk management.
FY17	1.625	0.085	1.710	-
FY18	1.396	0.082	1.478	Decrease in emissions with use of more accurate gas composition (SICK Analyser) on Shaft 2 Ventilation Air Methane (VAM) emissions. In Dec 17 there was a Pit bottom roof fall which delayed mining for 12 days.
FY19	1.260	0.083	1.343	Decrease in Greenhouse emissions driven by plant outage for 10 weeks at Tahmoor due to Number 3 shaft safety incident (shaft winder), however 4 weeks of this period was a Longwall changeover, so the additional impact was 6 weeks. The Net Energy Consumed increased in main due to a higher ratio of CH4 to CO2 in mine gas flaring at Tahmoor due to longwall gas geology.
FY20	1.239	0.088	1.326	In H1 FY20 – Reduction in normal VAM emissions Sept-Nov 19 due to a longwall non-production period, due to extended LW changeout (discontinuity). Ramp up of longwall production within the new, more highly CH4 rich Domain has been significantly slower than forecast. Dec 19 - Bushfire site power outage.
FY21	1.124	0.079	1.222	Approx. 110,000 t CO2-e Scope 1 reduction due to decreases in VAM emissions primarily driven by • Increase in gas drainage plant capacity and post-drainage capture efficiency (PDCE) with waste gas sent to EDL and flares. • 2 x LW non-production periods in Nov 20 and Jun 21 relating to LW changeout. • Partial extraction in a virgin LW environment (ie. 1st LW in new domain i.e. Western Domain)
FY22	0.964	0.091	1.055	Main data variances identified when compared to the previous corresponding period are a reduction in normal free-vented emissions. These reductions are believed to be contributed to by: 1. Significant reduction in CH4 VAM (15-20%). Equivalent CO2 VAM. CH4 VAM reduced 16.4% from FY21 (the methane component of VAM was 873,040 tCO_2e in FY21 and 729,570 tCO_2e in FY22) 2. In general, trend towards increases in carbon dioxide fugitive emissions when compared to FY21 (note – emissions of carbon dioxide, not carbon dioxide equivalent emissions):

				• CO2 vented increased 192.4% from FY21 (303 tonnes in FY21 to 886 tonnes in FY22) • CO2 sent to EDL increased 114.2% from FY21 (6,131 tonnes in FY21 to 13,135 tonnes in FY22) • CO2 sent to flare increased 65.8% from FY21 (10,126 tonnes in FY21 to 16,786 tonnes in FY22) 3. Composition of methane and carbon dioxide as expected due to the above variation has shifted: • CO2: total mass in total mass of gas generated from the mine during the year before capture and storage (measured per NGERs requirement) has increased 10.6% from FY21 (140,262 tCO_2e in FY21, 155,088 tCO_2e in FY22) • CH4: total mass in total mass of gas generated from the mine during the year before capture and storage (measured per NGERs requirement) has decreased 11.59% from FY21 (1,623,825 tCO_2e in FY21, 1,435,567 tCO_2e in FY22) 4. VAM reductions due to reduced LW SGE and improved post-drainage capture efficiency (PDCE). 5. 2 x extended LW non-production periods in Jul-Aug 21 and Mar-Apr 22 relating to Longwall relocation. Combined non-production timeframe marginally exceeds that of previous period.
FY23	0.992	0.079	1.072	Main data variances identified when compared to the previous corresponding period are discussed below: • A marginal overall increase VAM gas (~6% total gas). This included an 8% reduction in CH4 VAM and a corresponding increase % in CO2 VAM. It is believed that this is contributed to by: ○ a 7% increase in ROM production output; ○ the partial sealing of Tahmoor North workings, the decommissioning of the Tahmoor North booster fans in late September and early October 2022 – an area of the mine with higher CH4 gas make – this marginally lowered the shaft CH4 composition; and ○ a subsequent transition to a CO2 dominant LW operating environment from mid Oct 22 • A 30% increase in total gas capture through the Gas Drainage Plant (16kt combined CH4 and CO2 gas), driven primarily by a 50% increase in CO2 capture. Of the gas captured year on year, the additional gas was distributed between flaring (6kt), cogen (4kt) and free-venting (6kt). ○ Free-venting at the Gas Drainage Plant increased 400-500% due to elevated O2, low CH4 and associated operational constraints relating to Cogen (EDL) operability, and flare configuration/capacity. ○ The additional CO2 flared is a function of the increased CO2 capture in the Gas Drainage Plant and the proportional distribution of gas to flares. Of the additional 16kt through the Gas Drainage plant, 6kt reported to the Flares (~40% compared to historical figure of ~60%, and also noting the Cogen % distribution was lower than normal and free-venting significantly higher (as explained above) • The increase in gas capture through the gas drainage plant may have otherwise emitted through VAM.
FY24	1.084	0.777	1.162	• A marginal increase in combined ventilation CH4 and CO2 emissions in FY24 (VAM). This ~2-3% increase is believed to be driven primarily by:

				○ ~10% increase in ROM production FY24 2.8M vs FY23 2.6M. Longwall non-production periods consistent with FY23; and ○ Higher concentration of CH4 within VAM - The ratio of (CH4/(CH4+CO2)) in shaft VAM increased from 0.32 in FY23 vs 0.36 in FY24. The increase in CH4 make is contributed to by: ▪ Increase in outbye CH4 make following the full sealing of Tahmoor Nth in Nov 23, and ▪ Increase in LW Vent specific gas emissions driven by an increase in underlying seam CH4 content • A 20% increase in total gas capture into the GD plant (15kt combined CH4 and CO2 gas): ○ The gas captured year on year consisted of ~40% more CO2 (18kt), and ~10% less CH4 (3kt) driven by: ▪ ~10% increase in total flow through GD plant; and ▪ higher CO2:CH4 ratio in the working and underlying seams. ○ The gas entering the GD plant was distributed as follows: ▪ Venting 5% vs FY23 8% - ~20% less overall free-venting at the Gas Plant, including 40% reduction in CH4 vented (1kt) due to increased flaring capacity as a result of higher flow rate of Flare 1 vs Flare 2/3 (changing composition/thermal capacity of the flare); ▪ Flares 58% vs FY23 51% - ~40% increase in gas sent to flares, driven by an increase in CO2 composition within the GD plant; and ▪ FY24 Cogen 37% vs FY23 41% - ~10% increase in gas sent to Cogen, driven by a marginal increase in flow and a higher CO2 composition leading to an overall increase in CO2 and a reduction in CH4 to Cogen.
FY25	0.757886	0.064442	0.822328	When compared with the corresponding period in FY24, FY25 saw an approximate 30% reduction in total fugitive emissions (t CO2e), contributors include: • A 30% decrease in tonnes of CO2 in VAM, and a 27% decrease in tonnes CH4 in VAM CH4 driven by: ○ A significant reduction in VAM gas content from Jan 25 due to operational shutdown (non-production) in H2; partially offset by increase in CH4 SGE volumes in H1 coinciding with a 20% increase in ROM t • Drainage: ○ A ~5% reduction in in total drainage volume for FY25, most significantly contributed to by a progressive reduction in CMWG generation & total gas plant throughput in H2 due to operational shutdown (non-production); and ○ 22% increase in average CO2 composition and a corresponding 18% decrease in average CH4 (28 x GWP) composition. Changes driven by both the Bulli seam and underlying seams becoming more CO2 predominant – this is consistent with regional trend of CO2 increase to the west. Of the gas captured year on year (t CO2e), the changes in CMWG by output source were:

				• Free-venting– total decrease of 74%, FY24 total vented CMWG value inflated given the high quantity vented in Feb-24 during the GDP changeover; • Cogen (EDL) - no material change on full year basis; and • Flared – A ~17% decrease in flow on a full year basis following a reduction in H2 flow post operational shutdown.

8.2.5 Tahmoor South Project specific reporting

In accordance with Condition B19 (d) of the consent SSD 8445, the below **Table 8-4** and **8-5** demonstrates the reporting of annual and 3-year rolling average GHG emissions for the Tahmoor South Project.

Table 8-4 Calculated Scope 1 and 2 GHG Emissions

Project Year	Scope 1 GHGE (t CO2-e) (flaring and power generation occurring)	Scope 2 GHGE (t CO2-e)	Total Scope 1+ Scope 2 GHGE (t CO2-e)	Comments
1 (2021)	97,571	9,106	106,678	Compliant
2 (2022)	432,000	38,993	470,994	Compliant
3 (2023)	1,037,312	79,783	1,117,094	Compliant
4 (2024)	1,146,290	78,078	1,224,368	Compliant
5 (2025)	362,381	46,730	409,111	Compliant
Total	2,713,173	205,960	2,919,134	Compliant
3-year rolling average	871,867	65,618	937,485	Compliant

The emissions have not exceeded the predicted Scope 1 and 2 emissions as detailed in Appendix 9 of SSD8445 and given below in **Table 8.5** below.

Table 8-5 Predicted Scope 1 and 2 GHG Emissions (Appendix 9 from SSD 8445 consent)

Project Year	Scope 1 GHGE (t CO2-e) (flaring and power generation occurring)	Scope 2 GHGE (t CO2-e)	Total Scope 1+ Scope 2 GHGE (t CO2-e)
1 (2021)	230,041	14,764	244,805
2 (2022)	1,003,246	64,389	1,067,635
3 (2023)	1,636,849	105,054	1,741,903
4 (2024)	2,054,557	131,863	2,186,420
5 (2025)	1,843,089	118,291	1,961,380
6 (2026)	2,065,327	132,555	2,197,882
7 (2027)	2,070,977	132,917	2,203,894
8 (2028)	2,301,721	147,727	2,449,448
9 (2029)	1,859,357	119,335	1,978,692
10 (2030)	2,016,949	129,450	2,146,399
11 (2031)	1,761,824	113,076	1,874,900
12 (2032)	466,314	29,928	496,242
Total	19,310,249	1,239,350	20,549,599
Annual Average	1,609,187	103,279	1,712,466

8.2.6 EIS Commitments

Condition A2 (g) of the Consent states that the development may only be carried out generally in accordance with the Tahmoor South EIS. The relevant Tahmoor South EIS documents include:

a) Tahmoor South Project Environmental Impact Statement (EIS), Volumes 1 and 7, dated January 2019;
b) Tahmoor South Project Amendment Report (PAR), including Appendices A to R and response to submissions, dated February 2020;
c) Tahmoor South Project Second Amendment Report, Appendices A to O and response to submissions, dated August 2020;
d) Additional information responses dated 14 September 2020, 23 October 2020 and 4 November 2020; and
e) Submission to the Independent Planning Commission (IPC) February 2021.

Tahmoor South EIS commitments relevant to the Tahmoor South Air Quality Greenhouse Gas Management Plan are outlined in **Table 8-6** below.

Table 8-6 EIS Commitments

Instrument	Reference	Commitment	Where Addressed
Air Quality			
EIS/ RTS	AQ-1	**Potential impact:** Impacts of construction of the Project on air quality sensitive receptors **Management and mitigation measures:** Develop and implement an Air Quality Management Plan for inclusion in the CEMP.	The Tahmoor South Air Quality Greenhouse Gas Management Plan is utilised to manage construction and ongoing

		The Air Quality Management Plan would include management and mitigation measures to minimise dust generation.	operation of Tahmoor Coal.
RTS	AQ-2	**Potential impact:** Impacts of construction of the Project on air quality sensitive receptors **Management and mitigation measures:** Consult nearest residents to the proposed ventilation shaft sites during detailed design.	Construction of new ventilation sites not to be undertaken at this point.
RTS	AQ- 6	**Potential impact:** Impacts of the operation of the Project on air quality sensitive receptors **Management and mitigation measures:** Installation and monitoring of additional real-time PM10 monitors to target the most sensitive receptors likely to be affected by dust.	Two new PM10 and PM2.5 dust monitors installed in locations according to condition B18 (f)(i) of Consent SSD 8445.
Greenhouse Gas			
EIS/ RTS	GHG-3	**Potential impact:** Generation of GHG from operation of the Project **Management and mitigation measure:** Monitor the upcast ventilation shaft sites to enable accurate measurements of ventilation emissions. Monitoring to be reported within the Annual Review.	Emissions monitoring is reported above in **Section 10.2.4**
EIS/ RTS	GHG-4	**Potential impact:** Generation of GHG from operation of the Project **Management and mitigation measure:** Prepare an Energy Savings Action Plan in accordance with the NSW Energy Administration Amendment (Water and Energy Savings) Act, 2005 and the Guidelines for Energy Savings Action Plans (DEUS, 2005). The plan will include standards to minimise energy use and GHG emissions from the Project's operations.	Management and mitigation measures undertaken in accordance with Table 13 of the AQGHGMP. Completed in association with Condition B19 (a) of Consent SSD8445.
EIS/ RTS	GHG-5	**Potential impact:** Generation of GHG from operation of the Project **Management and mitigation measure:** Ensuring maintenance, calibration and record keeping is undertaken on the main ventilation shafts and fans to enable GHG emission calculations. Maintaining records for monthly electricity use and monthly ROM coal production to allow calculation of greenhouse gas emissions. Monitoring to be reported annually within the Annual Review.	Emissions monitoring is reported above in **Section 10.2.4** Maintenance, calibration and record keeping is undertaken in accordance with operating requirements to maintain equipment efficiency and reliability.
EIS/ RTS	EHR-1	**Potential impact:** Potential impact of diesel emissions on the health of individuals **Management and mitigation measures:** Undertake monitoring programs and regular maintenance and servicing of diesel vehicles on site to reduce risks to the exposed community.	Management and mitigation measures undertaken in accordance with Table 13 of the AQGHGMP. Diesel vehicles on site serviced according to service program and Work Order system.
PAR	NA	In relation to Scope 3 emissions, Tahmoor Coal's current end customers include: 1. Australian consumers of metallurgical coking coal (notably the two steelmakers in Australia: BlueScope and OneSteel Manufacturing, which is an affiliated company of Tahmoor Coal); 2. Consumers of metallurgical coking coal located in Germany, Japan, India, United Kingdom and Netherlands; and 3. End customers in other locations from time to time. Tahmoor Coal's current end customer base is located in countries that are signatories to the Paris Agreement within the United Nations Framework Convention on Climate Change. Tahmoor Coal would continue to manage the reduction of the Scope 3 emissions from the Amended Project to the greatest extent possible by continuing to sell its coal to customers with end users located in	Refer to Section 8.2 of the AQGHGMP for further information.

		countries that are parties to the Paris Agreement, or countries with equivalent domestic policies for reducing greenhouse gas emissions.	
Submission to IPC	2(a)	To support the CN30 program, and to support the objectives of the NSW Climate Change Policy Framework, Tahmoor Coal will continue to investigate opportunities for the reduction of Scope 1 and Scope 2 emissions from this Project as part of an Energy Savings Action Plan (or 'Air Quality and Greenhouse Gas Management Plan'). Tahmoor Coal is willing to make specific references to carbon neutrality commitments in any standalone Statement of Commitments.	Refer to Table 13 of the AQGHGMP for further information.
Submission to IPC	2(b)	Tahmoor Coal is willing to accept a Recommended Condition identical to conditions B32, B34, B35 and B36 'Management of Scope 3 Greenhouse Gas Emissions' of Part B 'Specific Environmental Conditions' of the United Wambo Open Cut Coal Mine (SSD 7142) Approval granted by the IPC on the 29 August 2019, relating to the preparation of an Export Management Plan, as described in 4.6.1.	Noted

8.3 Further Improvements

Tahmoor Coal will continue to operate and monitor the sites dust and air quality levels in accordance with the approved Tahmoor South Air Quality and Greenhouse Gas Management Plan (AQGHGMP) reviewed annually following the submission of this AEMR.

Tahmoor Coal continues to utilise the two (2) photometers installed during 2022 to analyse particulate matter for 2.5µm and 10µm in real-time equipped with alarms triggered by the approved Air Quality Trigger Action Response Plan for Tahmoor Coal.

Tahmoor Coal also continues to utilise the 24/7 remote access to real-time monitoring for PM_{10} data from the TEOM (Tapered Element Oscillating Microbalance) monitor at Charlies Point Road.

Current works are continuing incorporating a GHG Mitigation Plan into the AQGHGMP in consultation with the EPA and DPHI to be completed during the next reporting period.

Tahmoor Coal will continue to implement control strategies identified in the AQGHGMP and continue to identify areas for improvement over the next reporting period.

9 Erosion and Sediment Control

9.1 Environmental Management

Tahmoor Coal operates under a Water Management Plan (available on Tahmoor Coal website) and site Erosion & Sediment Control Plan (available on Tahmoor Coal website), prepared generally in accordance with the requirements of *Managing Urban Stormwater* (OEH, 2008), including *Volume 2E Mines and Quarries* (2008) (also known as 'the Blue Book'). Both documents have been approved by DPHI in accordance with the Tahmoor South Consent (SSD 8445) conditions.

A number of drive-in sumps are positioned around pit-top to capture and hold sediment laden water. A network of drains across pit-top direct runoff waters into the settling dams, which allow the capture and settling of sediment laden waters prior to discharge via Tahmoor Coal's Licence Discharge Point 1 (LDP1).

The unsealed equipment storage area between dams M1, M2, M3 and M4 is treated regularly with a dust suppressant to seal the roadways and reduce wind blown dust activity. The sealing agent is also useful in reducing sediment mobilisation during stormwater runoff.

Continued use of flocculent in surface water dams enables a reduction in turbidity and an increased settling of mobilised particles during rain events. Flocculent dosing rates are adjusted depending on Turbidity readings and daily visual inspections of turbidity of the pit-top dams. A Water Treatment Plant is currently being operated for the treatment of discharge waters from site. A real-time turbidity monitor is positioned on the overflow outlet on M4 for controlled monitoring of turbidity during release of waters. This is connected to the Tahmoor Coal's real time monitoring software system, Citect. This system is linked to alarms and SMS notifications based on the related Trigger Action Response Plan levels.

9.2 Environmental Performance

Dust gauge and water quality sampling are carried out monthly by third party licenced contractors while continuous water and continuous dust data is accessed remotely via telemetry by the environmental team onsite as required. The continuous dust monitors are connected to a telemetry service which issue alarms based on trigger levels reached in accordance with Tahmoor Coal's Air Quality TARP. Results obtained during the reporting period reflect Tahmoor Coal has operated in accordance with and within maximum limits as required by Environmental Protection Licence 1389 (EPL 1389) and have remained within maximum allowable Dust levels required by Consent SSD8445 and that the current dust suppression activities are sufficient in continued dust control for site.

Routine water quality monitoring of Total Suspended Solids (TSS) and Turbidity across Tahmoor Mine has not identified any issues associated with erosion and sedimentation. The site is operating within the licence limits for TSS and Turbidity.

9.3 Further Improvements

Tahmoor Coal will continue to implement control strategies identified in Tahmoor Coal's Water Management Plan and Erosion & Sediment Control Plan which incorporate site-wide erosion and sediment controls and their effective implementation.

10 Waste Management

10.1 Environmental Management

Tahmoor Mine's waste management system currently operates in accordance with the developed Waste Management Plan. This plan aids in ensuring waste streams generated at Tahmoor Mine are minimised and managed effectively and that all waste is collected, disposed of and tracked in accordance with regulatory requirements and in a way that does not compromise the health or safety of our personnel or impact the environment. This Waste Management Plan applies to all waste generated or stored at Tahmoor Coal and is part of the Tahmoor Coal's Environmental Management System (EMS).

In accordance with Consent SSD 8445 condition B48(e), Tahmoor Coal monitors and reports annually on the effectiveness of the waste minimisation and management measures undertaken onsite and included in this section.

According to the Waste Classification Guidelines Part 1: Classifying Waste (EPA 2014), waste is classified using six classes:

- Special waste;
- Liquid waste;
- Hazardous waste;
- Restricted solid waste;
- General solid waste (putrescible); and
- General solid waste (non-putrescible).

These classes are documented with their corresponding waste stream in Appendix A of the Waste Management Plan.

Tahmoor Coal recognises the importance of segregating the six groups of waste so they can be treated separately. Various bins are placed across the site to assist with waste segregation, refer to **Figure 10-2** for their locations at Tahmoor Mine. Waste produced on site is placed in the appropriate bin and if no bin fits the description of that waste, it is placed in a bunded area and covered in case of a rainfall event for correct disposal in consultation with an appropriate waste disposal contractor.

All waste that has the potential to cause environmental harm (e.g. hazardous waste) are placed in secure areas on site. Adequate containment (bunding) is provided to minimise the potential for spillage or leaching which could affect surface water quality or cause soil contamination. Bunded areas are constructed and operated generally in accordance with the EPA's Technical Guideline "Bunding and Spill Management" and Australian Standard (1940-2004) "The Storage and Handling of Flammable and Combustible Liquids". Particular waste streams, such as waste oil, are also managed to provide that they are safe from likely ignition sources to minimise the risk of fire. All bins and waste storage areas are clearly identified, designed to meet the storage requirements, and maintained to contain any spillages.

10.2 Environmental Performance

During the reporting period waste generated on site was managed in accordance with Tahmoor Mine's Waste Management Plan with the table below quantifying the waste generated during 2025. With completion of the previous longwall (LW S3A) during December 2024, mining activities were placed on hold for 2025. With the reduction in mining activity, waste was reduced across all waste streams, as shown in **Table 10-1** below. For bin and spill kit locations refer to **Figure 10-2**.

Table 10-1 Waste Streams for Tahmoor Coal

Waste Stream	2021	2022	2023	2024	2025
General Waste (tonnes)	1104.95	1226.43	1108.07	1077.54	30.79
Paper and Cardboard (tonnes)	19.59	14.7	11.78	11.96	1.07
Comingled Recyclables (tonnes)	-	0.06	0.17	0.13	0.00
Metal Recycling (tonnes)	-	539.03	368.73	268.08	11.48
Oil Filters (units)	1507	742	900	409.5	-
Oil Drums empty 20L (units)	4578	4628	8898	5380	-
Diesel Particulate Filters (tonnes)	60.19	55.84	15.3	30.28	-

10.2.1 Onsite Sewage Management

Tahmoor Coal operates a *Smith & Loveless* Sewage Treatment Plant (STP) onsite, illustrated in **Figure 10-1** below and utilises two (2) maturation treatment ponds to treat its effluent waters. Water Quality samples on pit top dams have continued to be taken to further understand the water quality and any potential effect on the Water Treatment Plant.



Figure 10-1: Smith & Loveless Sewage Treatment Plant (STP) onsite

10.2.2 Coal Washery Refuse (CWR)

During 2022, Tahmoor Coal's CWR obtained certified compliance with the EPA Coal Washery Rejects Order and Exemption 2014. The use of CWR is controlled by the NSW State Government Environmental Planning Authority (EPA), under the Protection of the Environment Operations (Waste) Regulation 2014.

This has provided Tahmoor Coal the opportunity to utilise its CWR for potential offsite purposes including but not limited to general construction fill, construction of public facilities (such as playing fields, tennis courts, golf courses and general landscaping), road construction usually as embankment fill, or subgrade for unsealed road surfacing. Further uses include topdressing, haul roads, drainage blankets, capping (e.g. tailings dams prior to application of topsoil layer), retaining wall backfill, cattle tracks and earth wall dams.

Due to the relatively consistent nature of the coal seam and surrounding geology; and the coal washing process (i.e. crusher and sieve sizing), the CWR material characteristics are consistent over time.

During 2025, no CWR was trucked offsite.

10.3 Further Improvements

Tahmoor Coal will continue to implement control strategies identified in Tahmoor Mine's Waste Management Plan and continue to identify areas for improvement over the next reporting period.

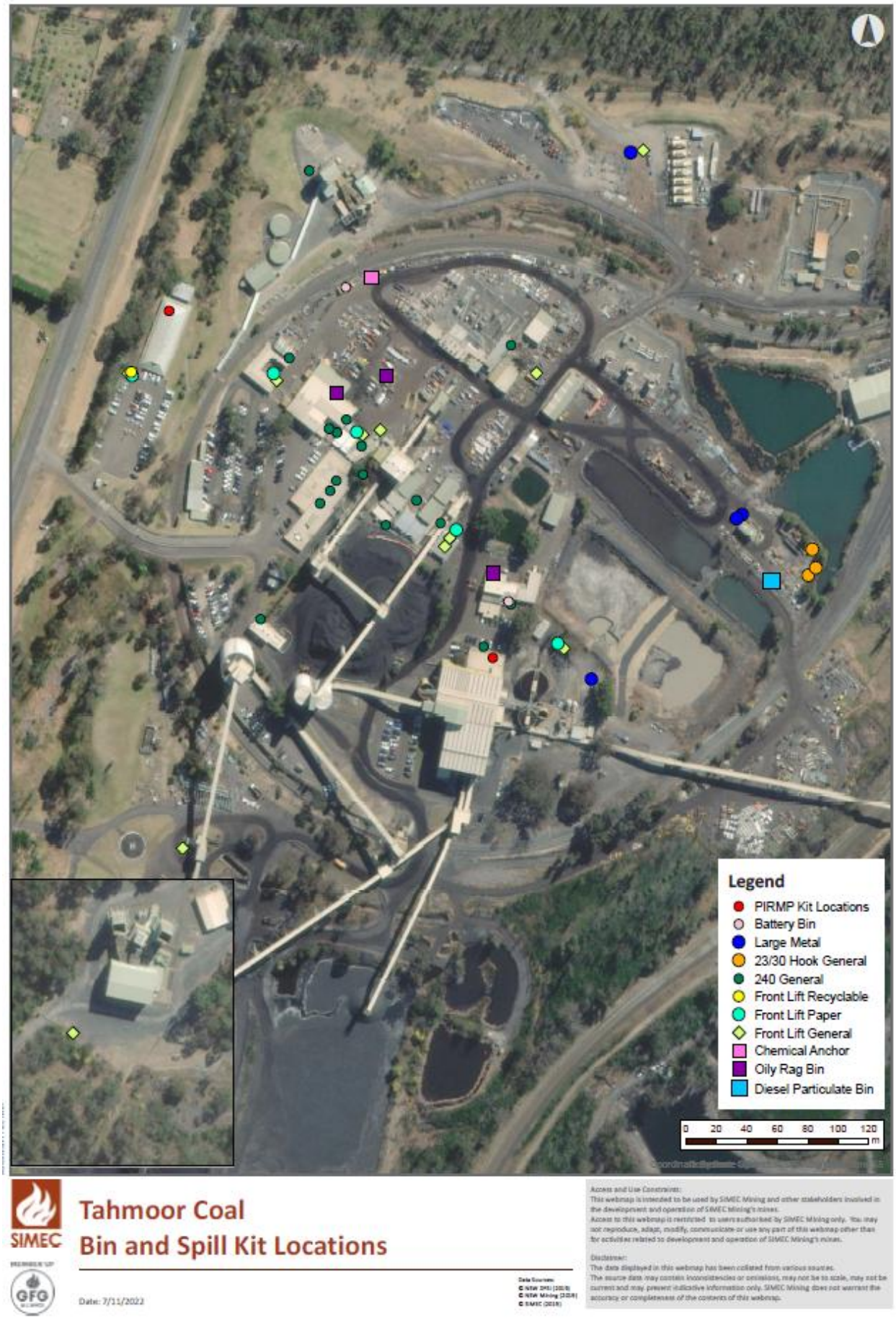


Figure 10-2 Bin and Spill Kit Locations

11 Contaminated Land

11.1 Environmental Management

Following a Stage 1 Preliminary Contamination Investigation completed by GHD in 2017 the following actions were completed including removal of former underground storage tanks (USTs) and remediation works around the waste oil tanks and diesel above ground storage tanks (ASTs).

Groundwater monitoring around the UST area is ongoing as part of the quarterly water quality sampling and monitoring program for pit top groundwater.

11.2 Environmental Performance

A Hazardous Building Material audit and inspection was undertaken by GHD in 2018.

The audit focused on:

- Asbestos containing materials (ACM);
- Lead based paint systems;
- Lead Dust;
- Synthetic Mineral Fibre (SMF);
- Polychlorinated Biphenyls (PCBs) in light fittings; and
- Ozone depleting substances (ODS).

The Hazardous Materials Audit identified several actions that were completed during 2019 and there remains one outstanding action as outlined in **Table 11-1** below. This action was delayed due to financial constraints affecting site.

Table 11-1 Hazardous Building Material Audit Actions

Action	Proposed Completion Date
Remove vinyl floor tiles from 5 offices and replace with new tiles	Complete
Labelling of all asbestos	Complete
Seal or encapsulate the eaves of BU001 which were found to contain asbestos	Works delayed – to be addressed in the future.
Remove dust on upper surface of ceiling panels in muster area	Complete
Remove dust in Washery HV switch room SR 105 and SR106- low level lead contamination	Complete
Remove dust from No3 Switch room SR103 – high lead on top of st169	Complete

There were no reportable incidents related to contaminated land during the reporting period.

11.3 Further Improvements

Tahmoor Coal will continue to monitor potential areas of contaminated lands across the site and have one (1) outstanding action to complete from the 2018 Hazardous Building Materials Audit (refer to **Table 11-1**).

12 Subsidence

12.1 Environmental Management

12.1.1 Western Domain

LW W4 extraction was completed on 13 September 2022. All subsidence related impacts were managed in accordance with the LW W3-W4 Extraction Plan approval. The post-mining monitoring period for the Western Domain has also ceased, no further remediation or monitoring is required in accordance with the LW W3-W4 Extraction Plan.

Tahmoor Coal applied and received approval to store brine in the Western Domain (Modification 2). A Residual Subsidence Management Plan was developed by Tahmoor Coal in consultation with the NSW Resources Regulator. This plan monitors ongoing residual subsidence movements that occur on selected natural features and built features following completion of active subsidence directly resulting from extraction of LW W1-W4, and during the refilling of mine workings in the Western Domain with groundwater and brine.

12.1.2 Tahmoor South Domain

12.1.2.1 LW S1A-S6A Study Area

The Extraction Plan Study Area for LW S1A-S6A is defined as the surface area that is likely to be affected by the extraction of LW S1A-S6A from the Bulli Coal Seam. This Study Area was calculated by combining the areas bound by the following limits:

- The predicted limit of vertical subsidence, taken as the 20 millimetre (mm) subsidence contour resulting from the extraction of LW S1A-S6A; and
- A 35^{o} angle of draw line from the limit of proposed extraction for LW S1A-S6A.

The Study Area is illustrated in **Figure 12-1**.

12.1.2.2 LW S1A-S6A Extraction Plan Context

The LW S1A-S6A Extraction Plan is part of the Tahmoor Coal Environmental Management Structure, as illustrated in **Figure 12-2**.

As part of the LW S1A-S6A Extraction Plan, a set of management plans was prepared to manage particular environment or built features with the LW S1A-S6A Study Area, which consisted of the following:

- Water Management Plan;
- Land Management Plan;
- Biodiversity Management Plan;
- Heritage Management Plan;
- Built Features Management Plan, with a number of sub-plans to manage potential environmental consequences to infrastructure and specific building structures as a result of secondary extraction; and
- Public Safety Management Plan.

The overall framework for subsidence monitoring and management of impacts of the LW S1A-S6A Extraction Plan is provided in the relevant Subsidence Monitoring Programs. Monitoring of

environmental and built features has been completed by Tahmoor Coal in accordance with management plans listed above.

It is noted that the management requirements for public safety are covered in the Built Features Management Plan and the Land Management Plan.

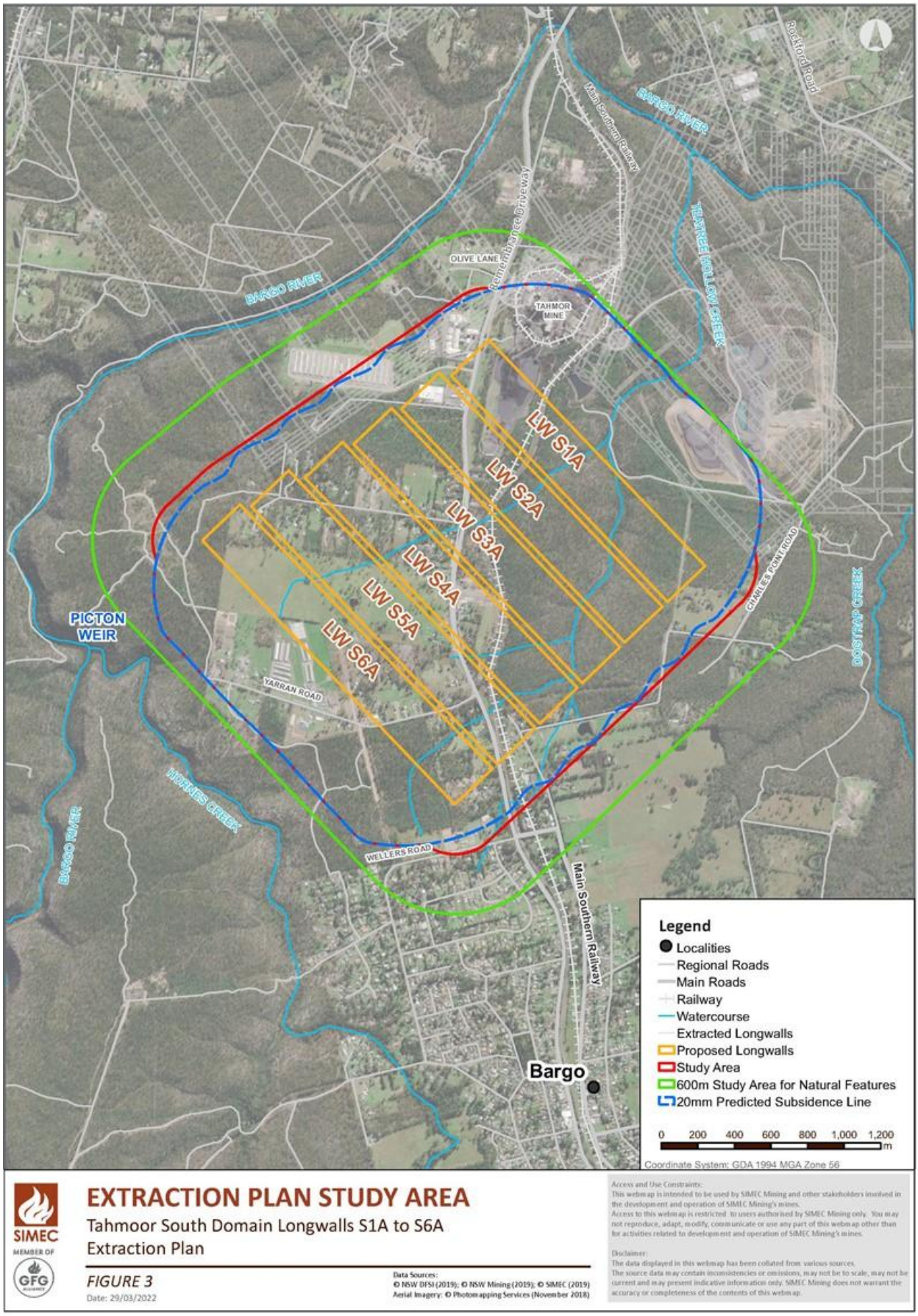


Figure 12-1 LW S1A-S6A Extraction Plan Study Area (source: LW S1A-S6A Extraction Plan)

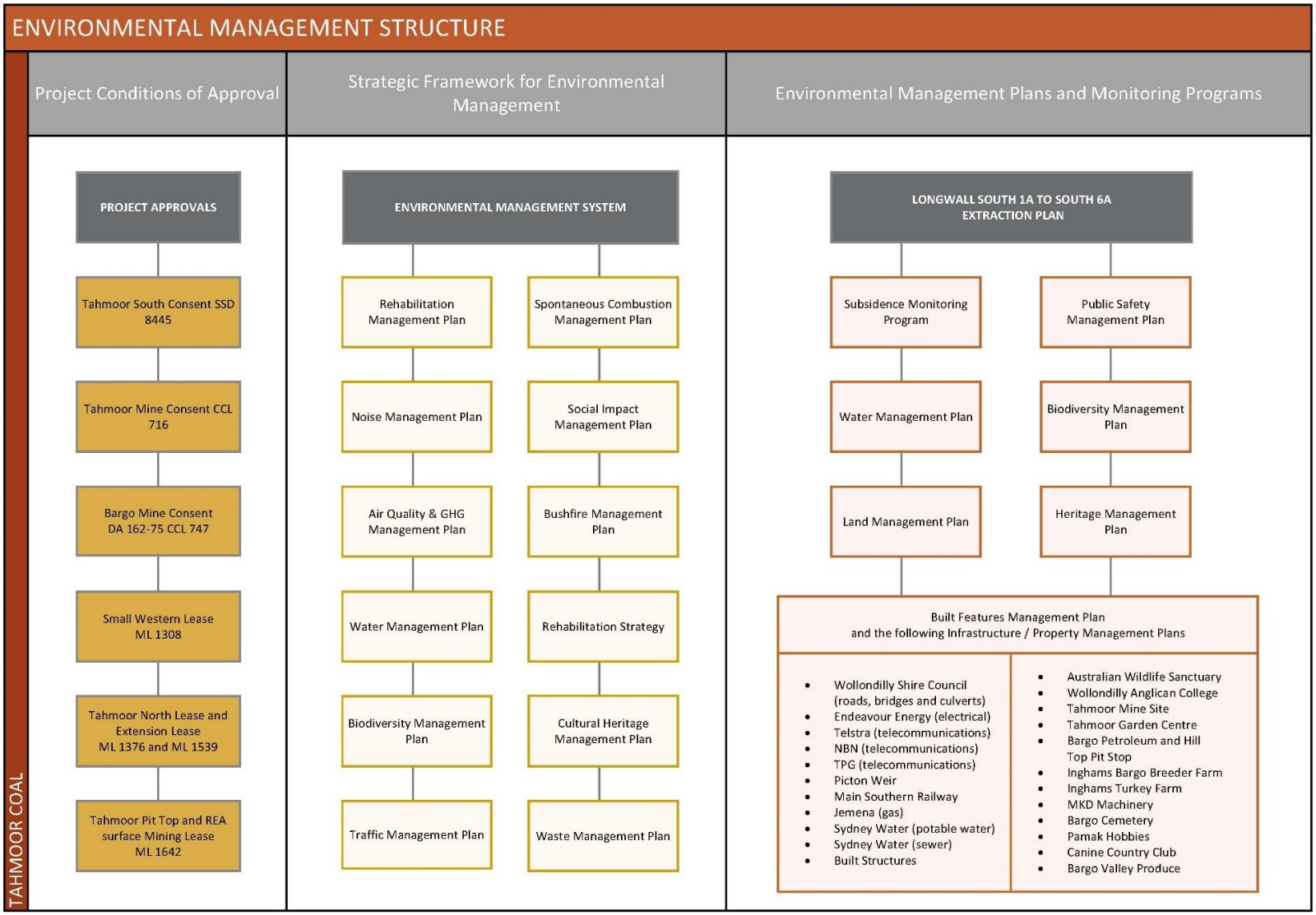


Figure 12-2 Overview of Environmental Management Structure for Tahmoor Coal (source: LW S1A-S6A Extraction Plan)

12.2 Environmental Performance

12.2.1 Western domain

12.2.1.1 Review of Subsidence Monitoring

A detailed review of subsidence monitoring data and impacts is provided in the quarterly Western Domain Residual Subsidence Reports (refer to **Appendix 12** for 2025 MSEC Western Domain quarterly reports and **Appendix 13** for SLR Western Domain 2025 groundwater review). These reports fulfil the reporting requirements of the Residual Subsidence Monitoring Plan – Tahmoor Western Domain – Longwall West 1 – West 4. The reports provide a summary of the subsidence and environmental monitoring results, subsidence impacts and management actions undertaken during the reporting period.

12.2.1.2 TARP Triggers Notifications

There was Two (2) TARP triggers under the Western Domain Residual Subsidence Management Plan.

- Site 10 (89.000 km PMLL): Intermittent exceedance of the 20 mm subsidence trigger was recorded between October 2024 and March 2025. Following IMG review, movements were assessed as low risk with no infrastructure impacts, and the trigger level was increased from 20 mm to 40 mm.
- Site 11 (89.629 km PMLL): Intermittent exceedance of the 20 mm subsidence trigger was recorded during the October to December 2025 reporting period. Movements remained minor, no impacts to rail infrastructure were observed, and monitoring continued in accordance with the Residual Subsidence Monitoring Plan.

12.2.2 Tahmoor South Domain

12.2.2.1 Review of Environmental and subsidence Monitoring

A detailed review of the Tahmoor South domain environmental monitoring and subsidence impacts is provided in the Section 12.3 to Section 12.10 of this report as required by LW S1A-S6A Extraction Plan.

During the reporting period, the LW S1A-S6A Subsidence Monitoring Program was implemented to monitor subsidence impacts within the Study Area. The Subsidence Monitoring Program includes twenty-eight (28) Global Navigation Satellite System (GNSS) units measuring absolute horizontal and vertical positions in real time installed directly above and adjacent to LW S1A-S6A. Ground surveys and inspections were also completed during the reporting period as per LW S1A-S6A Subsidence Monitoring Program. Extraction of coal from LW S1A commenced on 18 October 2022 and was completed on 4 July 2023. The extraction of coal from LW S2A commenced on 2 August 2023 and was completed on 6 April 2024. Extraction of coal from LW S3A commenced on 8 May 2024 and was completed on 17 December 2024. LW S4A is scheduled to commence extraction in December 2026.

All subsidence related impacts are managed in accordance with the Tahmoor South LW S1A-S6A Extraction Plan approval. Notable environmental monitoring observations during the reporting period are discussed in the following Sections for Biodiversity, Aboriginal Cultural Heritage, Historical Heritage, Built Features monitoring, Public Safety, Surface water, Groundwater, Flooding and Landscape Features.

Subsidence survey results were completed and reviewed by Tahmoor Coal and MSEC in accordance with the monitoring program. A review of the environmental monitoring results was completed by Tahmoor Coal, MSEC and environmental monitoring contractors in accordance with the monitoring program.

12.2.2.2 TARP Trigger Notifications

Notifications of subsidence events to government agencies is required in accordance with the Tahmoor South LW S1A-S6A Extraction Plan, and TARPs under the relevant Infrastructure and Environmental Management Plans. During the reporting period, there were twenty-two (22) active TARP level triggers relating to surface water, groundwater, physical features and natural behaviour and infrastructure. The TARP triggers are summarised below:

- **Surface Water Quality TARP (WMP1):**
    - Level 1 TARP triggered for monitoring site TT7-QLa for dissolved Aluminium in March and September 2025, TT2-QLa for pH in August 2025 and TT12-QLa for pH in September 2025;
    - Level 2 TARP triggered for monitoring site TT14-QLa for Dissolved Nickel in May 2025 and TT13-QLa for pH in August 2025; and
    - Level 3 TARP triggered for monitoring site TT7-QLa for EC in June 2025 and TT14-QLa for EC and pH in December 2025.
- **Surface Water Level TARP (WMP3):**
    - Level 2 TARP triggered for monitoring sites TT2-QLa, TT3-QLa, TT7-QLa, TT9-QLa, TT12-QLa and TT13-QLa.
    - Level 3 TARP triggered for monitoring sites TT2-QLa, TT3-QLa, TT9-QLa, TT12-QLa and TT13-QLa.
- **Physical Features and Natural Behaviour TARP (WMP5):**
    - Level 1 TARP triggered for monitoring sites TT13 in June and October 2025, TT10 in October 2025, TT15 in October and November 2025 and TT7 in December 2025;
    - Level 2 TARP triggered for monitoring sites TT10 in November and December 2025; TT13 in July and November 2025; and TT15 in January and December 2025; and
    - Level 3 TARP triggered for monitoring sites TT2, TT3, TT11 and TT12 in January, March to December 2025; TT7 in January and March 2025, TT9 in March, May to December 2025; TT10 in January, March to September 2025; TT13 in December 2025; and TT15 in March, May to September 2025.
- **Channel Stability, Sedimentation and Erosion (WMP7):**
    - Level 2 TARP triggered for monitoring site K64 in June, September and December 2025.
- **Groundwater Level TARP (WMP8) for Shallow Standpipes:**
    - The shallow groundwater level monitoring program (WMP8) identified TARP exceedances at ten (10) monitoring locations during the reporting period.
    - Level 1 TARP triggered for monitoring sites GW104659, GW109257, P51B, P53A, P53B;
    - Level 2 TARP triggered for monitoring sites P53C, P55A, P56A;
    - Level 3 TARP triggered for monitoring sites P55B, P55C.
- **Groundwater Level TARP for Shallow Groundwater Pressure (VWPs; WMP9):**
    - Analysis of the 37 shallow VWP intakes (<200 m depth) holding criteria under WMP9 identified TARP exceedances at five intakes during the reporting period;

- Level 1 TARP trigger at TBC032 (BGSS-200m);
- Level 2 TARP trigger at TBC032 (BHCS-181m);
- Level 3 TARP trigger at TBC024 (BGSS-185m), TBC024 (HBSS-139m), TBC032 (HBSS-131m);
- Of these, only the TBC032 (HBSS-131m) and TBC032 (BGSS-200m) results are assessed as groundwater responses, while the TBC024 intakes and TBC032 (BHCS-181m) carry unresolved datums and are reported with that qualification.

- **Groundwater Quality TARP (WMP11):**
  - Groundwater quality monitoring (WMP11) identified exceedances of 11 analytes during the reporting period. Three reached Level 3: dissolved Barium at four bores, dissolved Manganese at two bores and field Electrical Conductivity at two bores. The remaining eight analytes reached Level 2 at most for dissolved Nickel, dissolved Aluminium, dissolved Iron, dissolved Lead, dissolved Strontium, dissolved Zinc, dissolved Lithium, field pH.
- **Groundwater – Surface Water Interaction TARP (WMP12):**
  - The groundwater-surface water interaction monitoring program (WMP12) recorded exceedances at seven bores during the reporting period, corresponding to WMP8 exceedances at bores aligned with surface water monitoring sites: Three (3) at Level 1 (P51B, P53A, P53B), Two (2) at Level 2 (P53C, P55A) and Two (2) at Level 3 (P55B, P55C).
- **Aquatic Habitat and Macroinvertebrate Indicators TARP (BMP1):**
  - During Autumn 2025 monitoring season, an initial Level 3 was triggered at aquatic ecology monitoring site TT9, and Level 3 TARP triggers were extended for monitoring sites TTH16 and TTHt17 (from initial trigger Spring 2024) due to reduced aquatic pool habitats (dry pools) compared to baseline observations for over four consecutive sampling occasions. These monitoring sites correlate to surface water monitoring sites where reduction of water levels is related to both mining-induced impacts in combination with prevailing dry weather conditions. No further actions other than ongoing monitoring is required, a site visit invitation will be sent to key stakeholders regarding site TT9;
- **Main Southern Rail TARP:**
  - During the reporting period, no TARP triggers occurred. Monitoring identified only minor residual subsidence movements associated with completed extraction of LW S3A. The Main Southern Railway remained safe and serviceable throughout the reporting period;
- **Telecommunication TARP:**
  - During the reporting period, no TARP triggers occurred. Monitoring of the optical fibre cable within the Main Southern Railway corridor confirmed that the asset remained safe and serviceable, with no mining-related loss of signal identified.;
- **Tahmoor Mine Site TARP:**
  - During the reporting period, no TARP triggers occurred. Monitoring and inspections of mine infrastructure identified no mining-related impacts, and the mine site remained safe and serviceable;
- **3030 Remembrance Drive TARP:**
  - Non-conventional subsidence movements occurred along Remembrance Driveway potentially resulting in misalignment of several internal doors and tilting of one

vehicle hoist in the mechanic workshop. Proposed action was unable to be completed due to refusal of entry to the workshop by the owners;

Australian Wildlife Sanctuary TARP:

- During the reporting period, a Level 4 TARP trigger was sustained relating to pool water level reduction and fracturing in Wirrimbirra Creek. This trigger is largely managed by the Water Management Plan TARPs. A WCAMP will be prepared (if required) and implemented following the cessation of subsidence movements associated with Tahmoor South mining;

- **Wollondilly Shire Council TARP:**
  - During the reporting period, no TARP triggers occurred. Monitoring identified no mining-related impacts to local roads, bridges or associated infrastructure managed under the Wollondilly Shire Council Management Plan;
- **Wollondilly Anglican College TARP:**
  - During the reporting period, no TARP triggers occurred. No impacts to buildings, structures, dams, fences or other built features were observed; and
- **Tahmoor Garden Centre TARP:**
  - During the reporting period, no TARP triggers occurred. No mining-related impacts to built features were observed.

During the reporting period, there were no exceedances of environmental performance measures or indicators, as adopted from Condition C1 and Condition C5 of SSD 8445.

12.2.3 Further Improvements

In accordance with the Tahmoor South LW S1A-S6A Water Management Plan, pre-mining HoF holes were completed in the vicinity of LW S1A and LW S4A. Post-mining HoF holes will be completed above LW S1A and LW S4A following majority of the mine subsidence settlement. Further pre and post mining HoF holes are planned for the B-series upon approval of the future LW S1B-S6B Extraction Plan.

12.3 Subsidence

12.3.1 Western Domain

Residual subsidence monitoring was completed during the reporting period in accordance with the Residual Subsidence Monitoring Plan – Tahmoor Western Domain – Longwalls W1 to W4. Monitoring continued at key features including the LW W4 centreline, Main Southern Railway (including Picton Tunnel, Picton Viaduct and Victoria Bridge), the Picton-Mittagong Loop Line and groundwater monitoring locations.

Monitoring results indicate that residual subsidence across the Western Domain has reduced to low levels. The maximum observed vertical subsidence associated with the extraction of LW W1 to LW W4 is approximately 736 mm, recorded at GNSS Site 24 above the centreline of LW W4. Only minor changes in subsidence and ground movement were recorded during the reporting period and no adverse impacts to monitored infrastructure were identified.

Environmental monitoring observations during the reporting period are discussed in the following sections for built features and groundwater monitoring sections of this report.

12.3.2 Tahmoor South Domain

Subsidence monitoring was completed during the reporting period in accordance with the approved Tahmoor South S1A–S6A Extraction Plan and associated Subsidence Monitoring Program **(Figure 12-5**). Following completion of longwall extraction, the active subsidence zone continues to be monitored to assess residual ground movements and compare observed subsidence with predicted impacts. Results are reported through the annual subsidence report (**Appendix 11**) and periodic subsidence monitoring reports (available on request).

Extraction of LW S3A commenced on 8 May 2024 and was completed on 17 December 2024. Tahmoor Mine entered a period of reduced operations in early 2025 and no longwall extraction occurred during the reporting period. Monitoring undertaken during 2025 therefore focused on residual subsidence associated with the completed extraction of LW S3A.

Observed subsidence continued to develop within predictions, with rates of change reducing to low levels. A maximum total vertical subsidence of 1,105 mm was recorded at GNSS Site S26. The maximum measured change in subsidence during 2025 was 48 mm along the Main Southern Railway, reflecting ongoing minor residual subsidence.

During the reporting period, the LW S1A–S6A Subsidence Monitoring Program continued to be implemented across the Study Area. The monitoring network includes twenty-eight (28) Global Navigation Satellite System (GNSS) units that continuously measure absolute horizontal and vertical ground movements in real time. Monitoring results indicate that residual movements continued to reduce across the monitoring network during 2025.

A summary of the maximum observed ground movements associated with LW S3A to the end of the reporting period is provided in **Table 12-1**.

Table 12-1 Tahmoor South Subsidence Monitoring Observations for 2025 Monitoring Period (source: MSEC1430 Report R36)

	MSEC1430 Subsidence Monitoring Report 36	
Monitoring Period	1 January 2025 to 31 December 2025	
Progress of extraction	LW S3A commenced on 8 May 2024 LW S3A completed extraction 17 December 2024	
Observed Ground Movement Parameters	**Maximum Observed Total**	**Location**
Subsidence (mm)	1105	GNSS S26
Tilt (mm/m)	7.2	Main Southern Railway and Remembrance Drive
Hogging Curvature (km^{-1})	0.39	Main Southern Railway
Sagging Curvature (km^{-1})	-0.22	Main Southern Railway and Remembrance Drive
Tensile Strain (mm/m)	0.9	Remembrance Drive, Main Southern Railway and Caloola Road
Compressive Strain (mm/m)	-2.9	Remembrance Drive

12.3.2.1 Ground Survey Results

A summary of ground surveys completed during the reporting period is provided in the MSEC1430 LW S3A Subsidence Monitoring Report R36 (**Appendix 11**). Monitoring during 2025 focused on residual subsidence associated with the completed extraction of LW S3A. Ground survey results indicate that subsidence continued to develop within predictions, with only minor residual

movements recorded during the reporting period. The maximum increase in subsidence during 2025 was 48 mm along the Main Southern Railway. No additional subsidence-related impacts were observed during the reporting period.

Survey results associated with built features are discussed in **Section 12.6.2**.

12.3.2.2 Tahmoor Mine Boundary Survey Line (V-Line)

The final survey along the V-Line for LW S3A was conducted on 30 January 2025. Minor residual subsidence was measured, with a maximum change in subsidence of 16 mm recorded during 2025. Rates of change had reduced to low levels and no impacts were observed.

12.3.2.3 GNSS Unit Results

The development of subsidence along the centreline of LW S3A is illustrated in **Figure 12-3**.

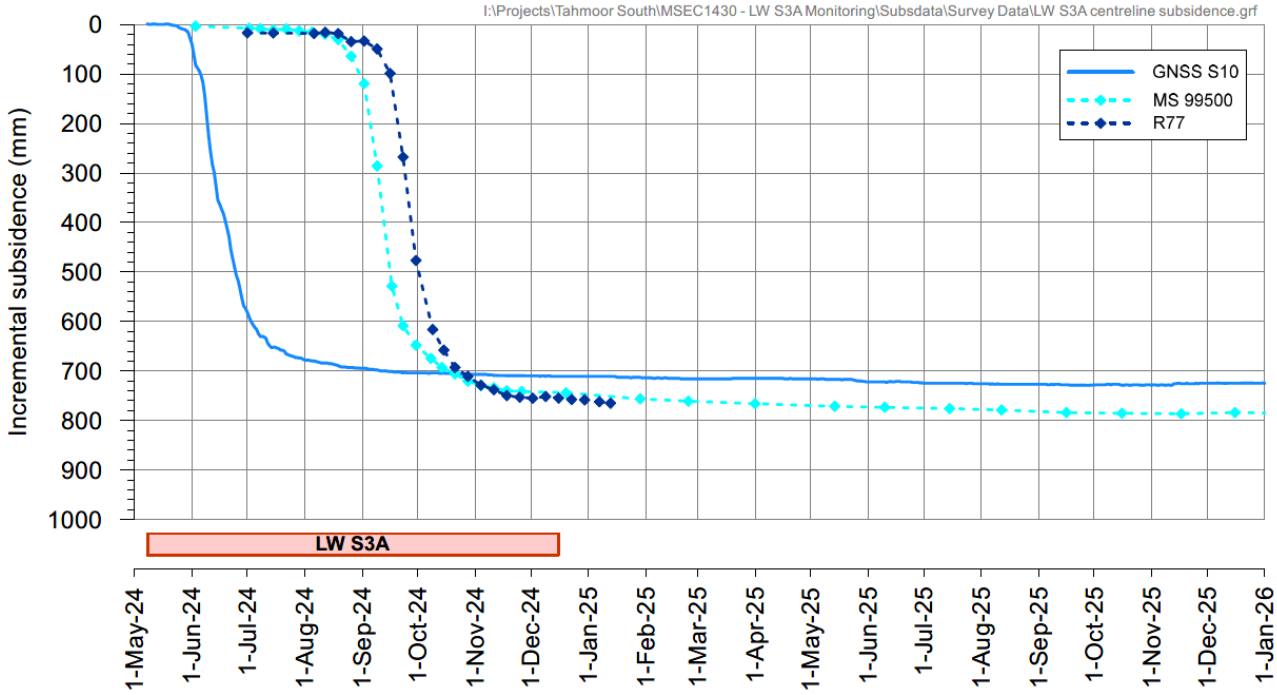


Figure 12-3 Development of observed subsidence above LW S3A (source: MSEC1430, Report R36)

Mining-induced movements associated with the extraction of LW S3A continued to be recorded by the GNSS monitoring network during 2025. The maximum measured incremental subsidence due to LW S3A was 724 mm at Site S10. Residual subsidence continued to develop gradually throughout the reporting period, with rates of change reducing to low levels. Observed subsidence remained within predictions. The maximum additional subsidence recorded during 2025 was 28 mm at Site S27 on the Main Southern Railway.

Changes in horizontal distances between paired GNSS units located across Teatree Hollow and the Tributary to Teatree Hollow (Wirrimbirra Creek) continued to be observed across Wirrimbirra Creek, with the greatest closure occurring between Sites S09 and S10 directly above LW S3A. Rates of change had reduced to low levels at all monitored locations during 2025.

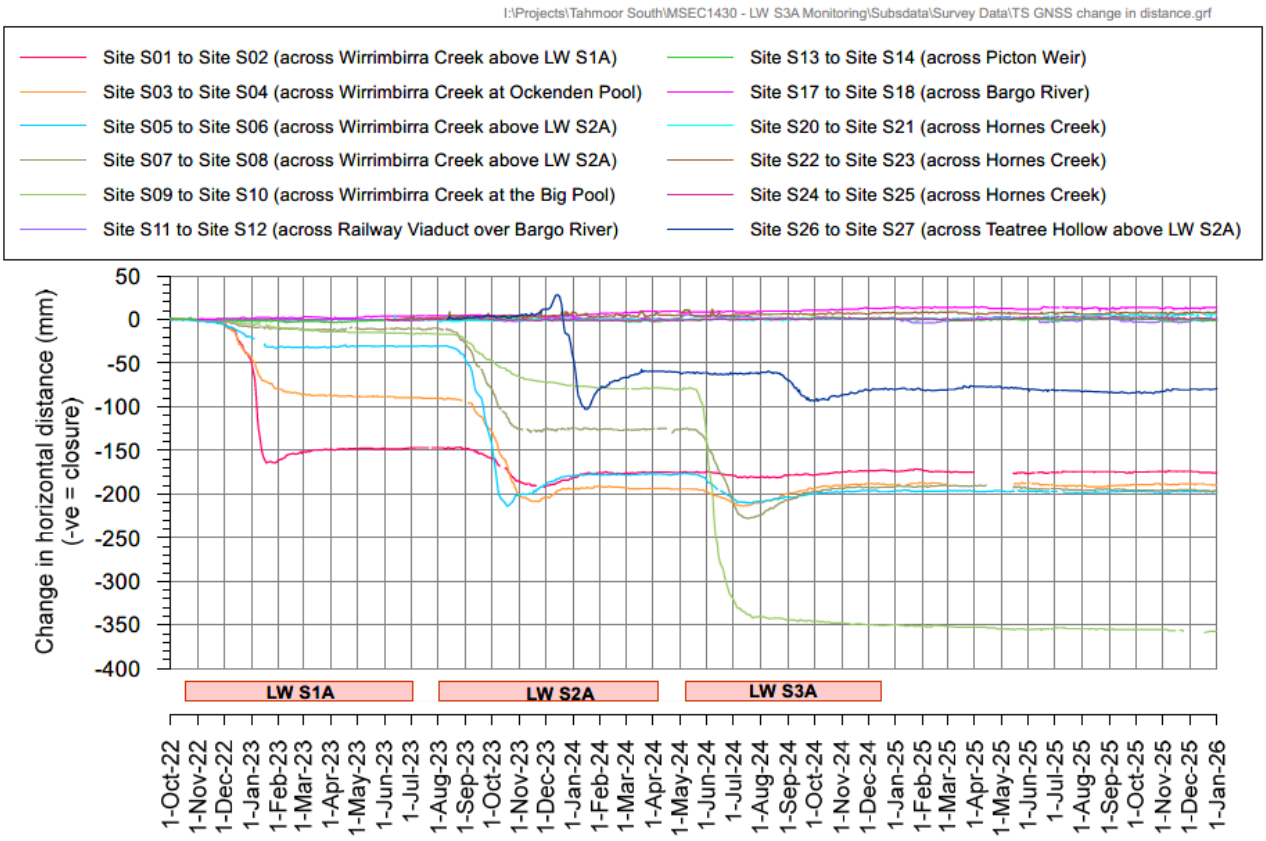


Figure 12-4 Observed changes in horizontal distances between GNSS units during LW S3A extraction (source: MSEC1430 Subsidence Monitoring Report 36)

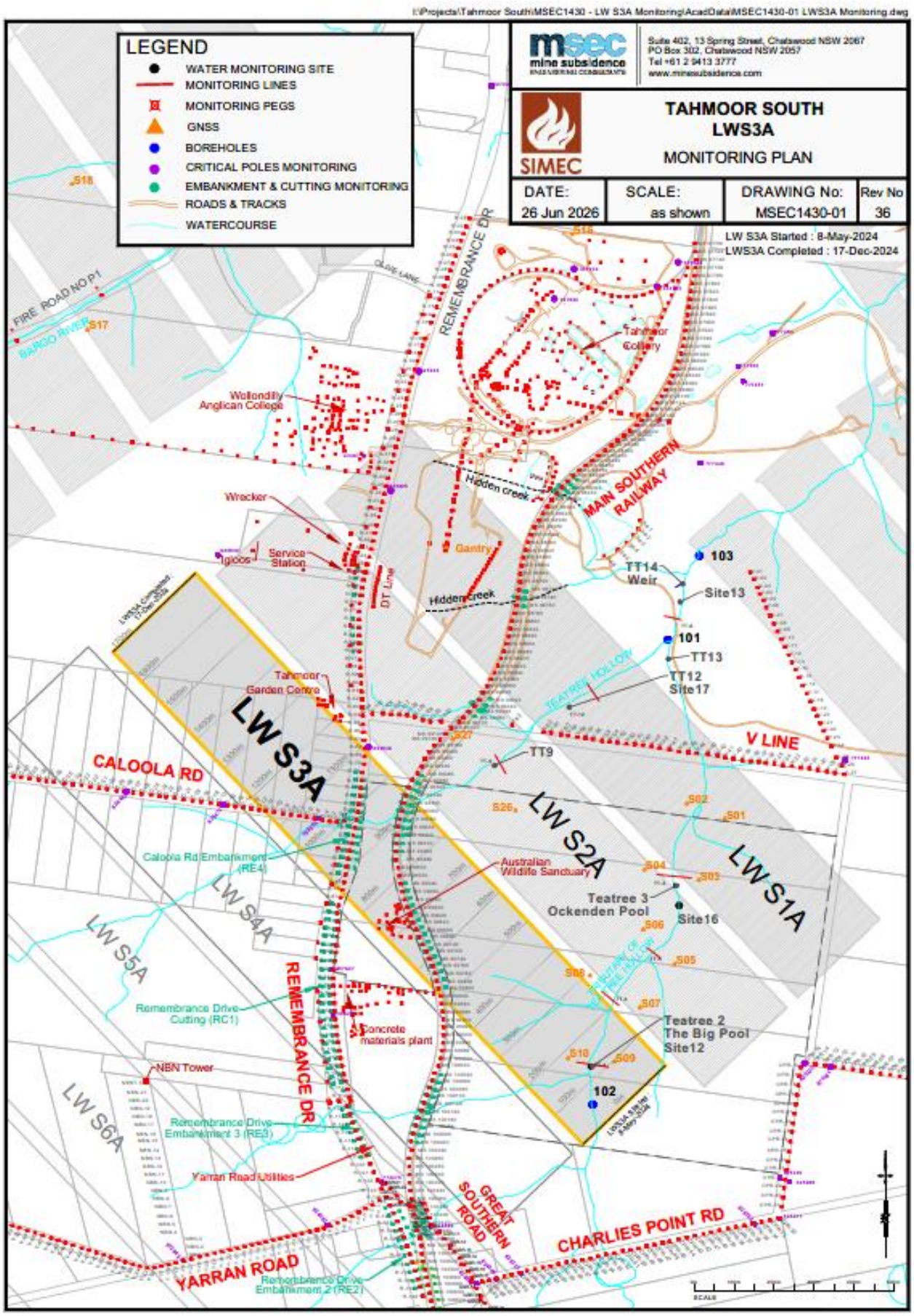


Figure 12-5 LW S1A-S6A Subsidence Monitoring Program (source: MSEC1430 Subsidence Monitoring Report 36, Appendix A)

12.3.3 Further Improvements

Subsidence monitoring will continue to be undertaken in accordance with the approved Tahmoor South S1A–S6A Extraction Plan and associated Subsidence Monitoring Program to monitor ongoing residual subsidence movements and potential impacts associated with future longwall extraction activities.

12.4 Biodiversity

12.4.1 Tahmoor Mine Site

Biodiversity is managed across Tahmoor Mine in accordance with the approved Biodiversity Management Plan (available on the Tahmoor Coal website), which has been prepared to address the requirements of Condition B7 of the SSD 8445 development consent for Tahmoor South.

Tahmoor Coal undertakes ecological assessments and due diligence vegetation assessments prior to undertaking activities likely to require vegetation clearing as documented in our approved Biodiversity Management Plan. Several threatened plant species have previously been identified on the surface mining lease areas, including *Grevillea parviflora* and *Persoonia bargoensis,* which have been identified at the REA, near the No.2 Shaft area, and along Charlies Point Road. *Grevillea parviflora* is listed as vulnerable on both the *Biodiversity Conservation Act 2016* (BC Act) and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). *Persoonia bargoensis* is listed as endangered under the Biodiversity Conservation Act and vulnerable under the EPBC Act.

No impacts to biodiversity were recorded during the reporting period for onsite or the REA.

12.4.2 Tahmoor North Domain

Historic mining related subsidence in Myrtle Creek and Redbank Creek had resulted in reduced pool holding capacity. Water flow in affected pools was diverted through the subsurface via cracks and fissures in the bedrock, which resulted in a reduced pool holding capacity in impacted pools.

Pool remediation works were completed in August 2022 at Myrtle Creek and in November 2024 at Redbank Creek. The work was completed in accordance with the approved Corrective Management Action Plan (CMAP) by the Resources Regulator and in consultation with a variety of stakeholders. The remediation process consists of drilling a series of boreholes and injecting an expanding hydrophobic polyurethane grout material. This creates a “curtain wall” or subsurface dam wall across the creek bed to a depth where the fracture network has been detected, which seals the fractures and helps redirecting the stream flow back to the surface. This remediation technique is also used in combination with a grid pattern grouting process that acts as a liner to improve the water retention capability of the pool. All remediated sites at Redbank and Myrtle Creek are currently in a monitoring phase for aquatic ecology, surface water and groundwater level monitoring.

The grout material has also been used successfully for creek rehabilitation in Sydney Catchment Authority areas as it has minimal ecotoxicological effects and has proven to be highly effective in remediating subsurface fractures. To assess the remediation effectiveness, aquatic ecology monitoring is undertaken biannually in Autumn and Spring with specific reference to the recovery of stream health in pools that have been rehabilitated.

Monitoring was conducted using the Australian River Assessment System (AUSRIVAS) method, aquatic habitat assessment, quantitative macroinvertebrate survey and physiochemical water

quality results in Autumn and Spring of 2019 before remediation commenced, and during Autumn and Spring of 2020, 2021, 2022, 2023, 2024 and Autumn 2025. Sites unaffected by subsidence are also monitored for aquatic health in the creek systems and act as a benchmark for comparison.

Note: no monitoring was completed during Spring 2025 due to contractual dispute and payment constraints. A non-compliance notification was submitted to the NSW Resources Regulator on 6 March 2026.

12.4.2.1 Myrtle Creek Aquatic Ecology Monitoring

Bi-annual aquatic ecology monitoring is conducted by Niche Environment and Heritage (Niche) at Myrtle Creek to assess the outcomes of post-mining stream health monitoring before and after remediation. Monitoring was conducted in Autumn 2025 at Pool 20, Pool 18, Pool 14, Pool 12a, Pool 11, Pool 10 and Pool 30 (un-impacted site, seasonal benchmark) using Standard Australian River Assessment System (AUSRIVAS) methods and quantitative macroinvertebrate surveys (refer to **Figure 12-6** for location of the sampling sites). The report (Niche, 2025a; available on request) includes monitoring results undertaken in 2019, before remediation commenced and seasons from 2020 to 2025.

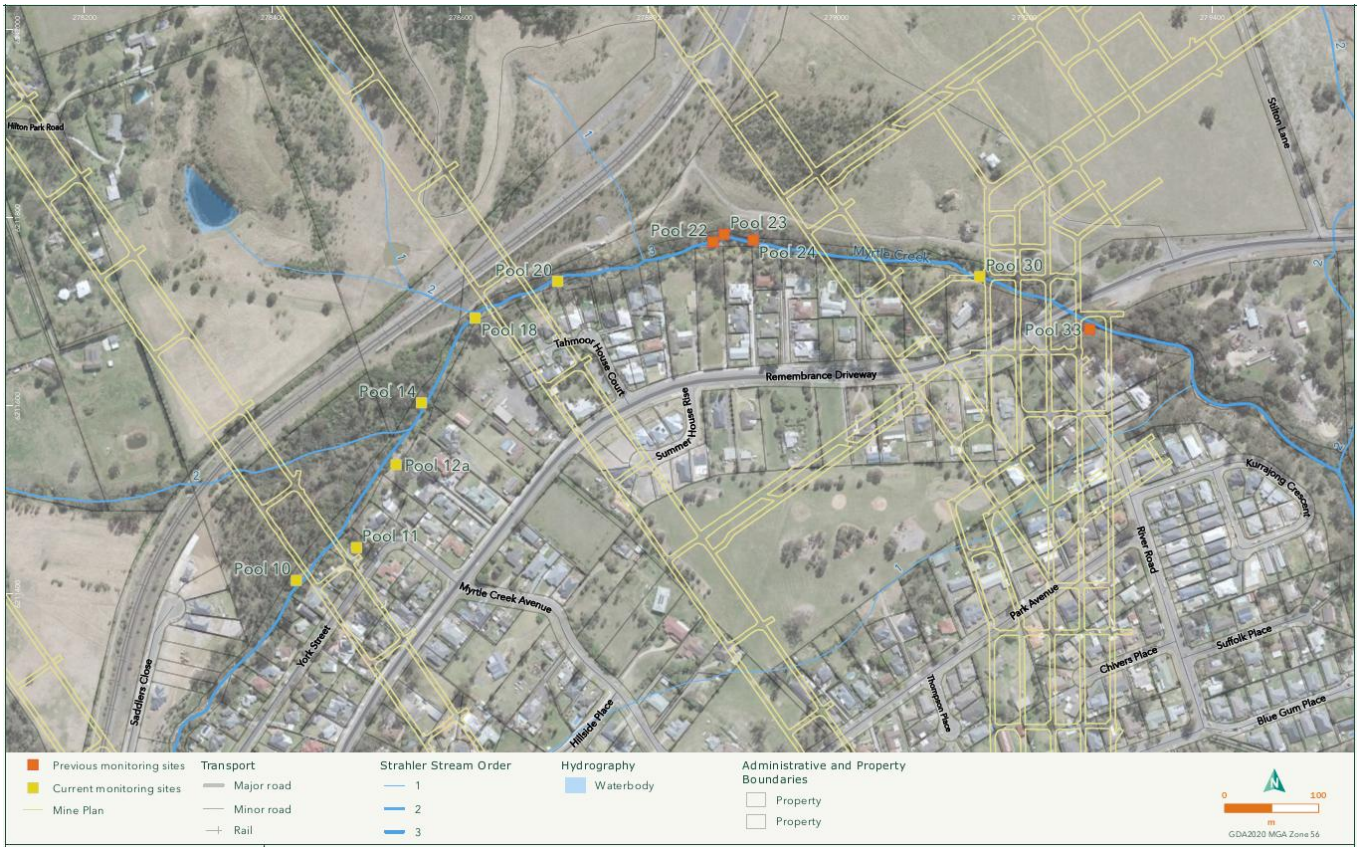


Figure 12-6: Myrtle Creek Aquatic Ecology Monitoring Sites

Myrtle Creek - Autumn 2025 Survey

Table 12-2 presents the summary of the aquatic ecology assessment for all the pools sampled in Autumn 2025. The report indicates that all sampled pools were holding considerable water at the time of the survey. The water was visually turbid with low flow recorded at each site. Pool conditions were consistent between remediated pools and the seasonal benchmark Pool 30.

Water quality was generally consistent across all remediated pool sites and the reference (Pool 30). The key findings include:

- Dissolved oxygen saturation levels were comparable across sites and below the default guideline value (DGV) in all pools including the seasonal benchmark pool 30.
- Electrical conductivity levels were above default trigger values (DGV's) at all sites. Electrical conductivity was highest at the seasonal benchmark Pool 30 but the value recorded is within the range of previous data recorded at this site, which has been variable to date.
- The pH levels marginally exceeded DGV's at Pool 18 as well as the seasonal benchmark Pool 30.
- Alkalinity levels were consistent across pools.

The AUSRIVAS Band for all the remediated pools was ranging from Band B (Pool 10), Band C (Pools 11, 12, 14 and 20) and Band D (Pool 18). Pool 30 (benchmark site) scored Band A (typically Pool 30 was recording Band B and Band C levels on previous monitoring events).

The results indicate that the taxa recorded at the remediated pools were ranging from 3 to 15. The results were within the range of the benchmark site Pool 30, recording 14 taxa and considered nominal for low flowing pool edge habitat in the locality. Limited EPT index taxa were detected at the remediated sites, including Pool 30 seasonal benchmark indicating that few sensitive families were represented at the monitoring sites.

Niche has developed ecological recovery targets to establish a descriptive ranking of the level of ecological recovery and considers the following factors:

- AUSRIVAS Band scores.
- Pool water level (aquatic habitat), aquatic habitat observations, the number of taxa and EPT taxa scores provide additional supporting information to interpret the Band scores in terms of ecological recovery.

These indices are benchmarked against Pool 30, providing a seasonal reference.

Table 12-2 summarises the indicative ecological recovery levels for each site including seasonal benchmark. In Autumn 2025, "good" ecological recovery was recorded at Pool 10, "moderate" recovery for pools 12a, 14 and "limited" recovery levels were observed at Pools 11, and 18 while Pool 30, seasonal benchmark recorded an equivalent recovery score of "excellent", although some remediated pools recorded comparable number of taxa or EPT taxa results.

The Autumn 2025 results indicate that water was retained at most of the remediated sites for five or more sampling seasons (except for Pool 14 in Spring 2023) which provided aquatic habitat at all sites.

The report suggests that the variation in levels of ecological recovery at some of the remediated sites may be due to the natural flow status of similar pools in bedrock dominated sections of intermittent streams within the locality. Niche also indicates that these intermittent flowing bedrock dominated pool sections in Myrtle Creek may naturally not support extensive aquatic habitats even under long term recovery and are likely to be more sensitive to environmental fluctuations, such as rainfall patterns.

Niche recommends that continued monitoring (bi-annual surveys) is carried out at Pool 14, Pool 18 and Pool 11 in addition to benchmark site, Pool 30. Despite consecutive seasons of "good" recovery for Pool 11, further monitoring is recommended for Pool 11 to determine if the "limited" recovery score in Autumn 2025 is an isolated event, not related to the pool holding capacity. Based on previous monitoring and ecological recovery results for Pool 10, 12a and 20, Niche suggests that a review of rehabilitation success, in conjunction with the results of pool water level monitoring may meet the expectation of recovery and allow these sites to be successfully rehabilitated.

Further monitoring would assist in determining whether levels of recovery continue to improve and indicate the relative importance of prevailing conditions on stream health within the remediated pools.

Season	Pool holding capacity	Aquatic habitat present	Aquatic invertebrates present (no. of taxa)	Sensitive aquatic invertebrates (EPT taxa)	AUSRIVAS Band	Indicative ecological recovery level
Pool 10						
Autumn 25	Yes	Yes	11	1	B	Good
Pool 11						
Autumn 25	Yes	Yes	3	0	C	Limited
Pool 12a						
Autumn 25	Yes	Yes	11	1	C	Moderate
Pool 14						
Autumn 25	Yes	Yes	12	1	C	Moderate
Pool 18						
Autumn 25	Yes	Yes	4	0	D	Limited
Pool 20						
Autumn 25	Yes	Yes	15	2	C	Moderate
Pool 30 – Seasonal Benchmark (equivalent recovery indicator)						
Autumn 25	Yes	Yes	14	2	A	N/A

Table 12-2: Myrtle Creek Indicative Ecological Recovery Summary – Autumn 2025

12.4.2.2 Redbank Creek Aquatic Ecology Monitoring

Biannual aquatic ecology monitoring is carried out at Redbank Creek to identify to impacts from longwall mining and to monitor the outcome of the remediation works to restore habitat (Niche, 2025; available on request). Monitoring was conducted using standard Australian River Assessment System (AUSRIVAS) methods and quantitative macroinvertebrate surveys. Surveys were carried out in Autumn 2025 at Pool 28, Pool 37, Pool RB5, Pool RB6, Pool RR11, Pool RR19, Pool RR26, (remediated sites) and RB33 (benchmark non-impacted site), refer to **Figure 12-7** for locations of the sampling sites.

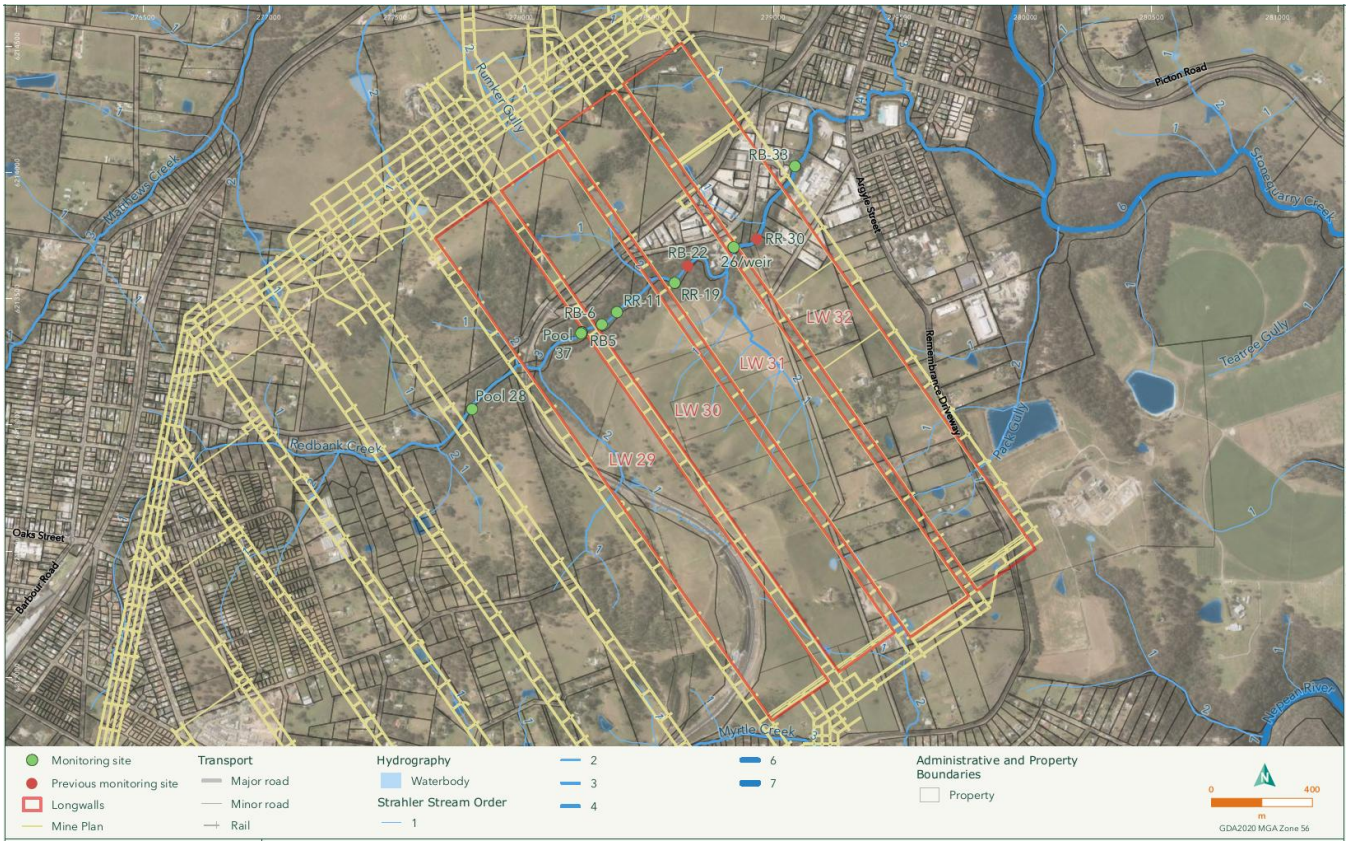


Figure 12-7 Redbank Creek Aquatic Ecology Monitoring Sites

Redbank Creek - Autumn 2025 survey

Table 12-3 presents the summary of the aquatic ecology assessment for all the pools sampled in Autumn 2025.

The results show that all sampled pools were holding water at the time of the survey and had some aquatic habitat present to sample. The water at most sites was either turbid or had iron flocculant present which has been common at both remediated sites and seasonal benchmark site across previous monitoring. Water quality was consistent across all sites with most water quality parameters consistent across remediated sites including the seasonal benchmark site, Pool RB33.

Electrical conductivity readings were above default trigger values (DGVs) at all sites and were highest at the seasonal reference site RB33.

All pools had dissolved oxygen levels below DGV's, as was the reference site RB33.

Turbidity levels were above DGVs at remediated Pool RB6, as well as the seasonal reference pool RB33. Turbidity levels at these sites may have been influenced by the high iron floc presence.

The AUSRIVAS Band for all the remediated pool was ranging from Band A to Band C, with Pool RR11 scoring Band A, Pool 28, Pool RB6, Pool RR19 and Pool RR26 scoring Band B and Pool RB33 (seasonal benchmark) scoring Band C along with Pool 37 and RB5. The number of taxa recorded at the remediated sites were ranging between 9 and 15, comparable to the benchmark site, Pool RB33, which recorded 13 taxa. The variability of the results could indicate that the intermittent flowing bedrock and boulder dominated pool sections in Redbank Creek may naturally not support extensive aquatic habitats even under long term recovery.

Niche has developed ecological recovery targets to establish a descriptive ranking of the level of ecological recovery and considers the following factors:

- AUSRIVAS Band scores
- Pool water level (aquatic habitat), aquatic habitat observations, the number of taxa and EPT taxa scores provide additional supporting information to interpret the Band scores in terms of ecological recovery.

These indices are benchmarked against RB33, providing a seasonal reference.

Table 12-3 summarises the indicative ecological recovery levels for each site including seasonal benchmark. In Autumn 2025, "moderate" ecological recovery was recorded at Pools 37 and RB5, while "good" recovery levels were observed at 28, RB6, RR19, and RR26, with these sites recording results comparable to the seasonal benchmark site, RR33. Pool RR11 indicative recovery level was "excellent" for the Autumn 2025 monitoring event.

Recent sampling (between 2022 to 2024) of these pools has typically been completed under above average (favourable) or below average (unfavourable) rainfall conditions during periods of highly variable seasonal rainfall conditions. The sampled macroinvertebrate assemblages are likely to reflect these factors. It is less clear what stream health results may be returned under 'nominal' (average) rainfall conditions. The Autumn 2025 results demonstrate that the remediated pools have the capacity to support more sensitive macroinvertebrate assemblages (and improved stream health results) under more favourable environmental conditions.

On the basis of previous monitoring results, Niche suggests that a review of rehabilitation success, in conjunction with the results of pool water level monitoring, may be considered for Pools RB6, RR11, RR19 and RR26 to review the need for further monitoring at these sites. Ecological monitoring results indicate that these pools have re-established water-holding capacity and demonstrated the ability to sustain aquatic habitats and macroinvertebrate assemblages.

Further monitoring would assist in determining whether levels of recovery continue to improve and indicate the relative importance of prevailing conditions on stream health within the remediated pools: Pools 28, 37, RB5.

Season	Pool holding capacity	Aquatic habitat present	Aquatic invertebrates present (no. of taxa)	Sensitive aquatic invertebrates (EPT taxa)	AUSRIVAS Band	Indicative ecological recovery level
Pool 28						
Autumn 25	Yes	Yes	9	1	B	Good
Pool 37						
Autumn 25	Yes	Yes	8	1	C	Moderate
Pool RB5						
Autumn 25	Yes	Yes	8	2	C	Moderate
Pool RB6						
Autumn 25	Yes	Yes	15	2	B	Good
Pool RR11						
Autumn 25	Yes	Yes	9	1	A	Excellent
Pool RR19						
Autumn 25	Yes	Yes	11	0	B	Good

Season	Pool holding capacity	Aquatic habitat present	Aquatic invertebrates present (no. of taxa)	Sensitive aquatic invertebrates (EPT taxa)	AUSRIVAS Band	Indicative ecological recovery level
Pool RR26						
Autumn 25	Yes	Yes	12	1	B	Good
Pool RB33 – Seasonal Benchmark (equivalent recovery indicator)						
Autumn 25	Yes	Yes	13	1	B	N/A

Table 12-3: Redbank Creek Indicative Ecological Recovery Summary – Autumn 2025

12.4.3 Tahmoor South Domain

The LW S1A-S6A Biodiversity Management Plan was prepared to manage the potential environmental consequences of LW S1A-S6A extraction on aquatic and terrestrial flora and fauna in accordance with Condition C8 of SSD 8445.

During the reporting period, the LW S1A-S6A Biodiversity Management Plan has been implemented to monitor ecology in the Study Area, as outlined below:

- Aquatic ecology – Bi-annual (Spring and Autumn) monitoring, and
- Terrestrial ecology – Bi-annual (Spring and Autumn) monitoring.

During the reporting period, aquatic ecology monitoring and terrestrial ecology monitoring was completed by Stantec in Autumn 2025. Due to financial constraints, aquatic ecology monitoring and terrestrial ecology monitoring was not completed in Spring 2025. DPHI was notified of this non-compliance on 17 December 2025.

The following sections summarise the observations made during the reporting period for aquatic and terrestrial ecology. Performance against all Biodiversity Management Plan TARPs (BMP1-4) for the reporting period are summarised in **Table 12-4**, and actions and responses completed relating to any TARP triggers are discussed in the following sections.

Baseline monitoring commenced in 2023 for the B-series Extraction Plan preparation, with the establishment of four future impact sites (referred to as “B-series” monitoring sites), along Dog Trap Creek during the Spring 2023 biodiversity monitoring program. The four terrestrial monitoring sites (comprised of riparian vegetation and amphibian monitoring locations), were established along Dog Trap Creek to collect baseline data to inform the “B-Series” Extraction Plan to be prepared for the future longwalls proposed in the locality. Baseline monitoring of these sites has continued to be been carried out in Autumn 2025, however due to financial constraints, aquatic ecology monitoring and terrestrial ecology monitoring was not completed in Spring 2025.

12.4.3.1 Aquatic Ecology

The aquatic ecology monitoring program for LW S1A-S6A has been designed to monitor subsidence-induced impacts on aquatic ecology. The following survey methods have been completed during baseline and during mining monitoring sampling:

- Aquatic habitat assessment of geomorphology, channel diversity, bank stability, riparian vegetation and adjacent land use, water quality, macrophytes and local impacts and land use practices in accordance with the Australian River Assessment System (AUSRIVAS);
- Macroinvertebrate survey:

- AUSRIVAS macroinvertebrate sampling; and
- Quantitative benthic macroinvertebrate monitoring program.

The aquatic ecology monitoring program is primarily focused on macroinvertebrate monitoring regimes including AUSRIVAS and quantitative using Before After Control Impact (BACI) design.

12.4.3.1.1 Overview of Monitoring Results

Aquatic monitoring for Autumn 2025 was conducted by Stantec from 29-30 May and 5-6 June 2025. A total of thirteen locations were sampled within Teatree Hollow, Hornes Creek and Moore Creek. These sites comprised eight (8) impact sites (TTHt9, TTH12, TTH13, TTH13 (d/s), TTH16, TTH17, TTHt17 (d/s), BRt6) and five (5) control sites (HC6, HC7, HC8, MC14, MC15). The locations of monitoring sites are illustrated in **Figure 12-8**.

Control sites HC6 and impact sites BRt6 and TTHt9 were added to the program in the Spring 2023 round of monitoring in order to assess potential impacts to these sections of a waterway associated with potential future longwall panels.

The following results were observed for this monitoring period (Stantec, 2026a):

- Autumn 2025 surveys received substantial rainfall immediately prior to survey being undertaken;
- Five of the eight impact and all control sites contained sufficient water for Water Quality and macroinvertebrate monitoring;
- Impact sites TTHt9, TTH16 and TTHt17 were dry during Autumn 2025 and have been for four and five consecutive monitoring periods
- The observations made during the Autumn 2025 monitoring support the conclusions from previous monitoring and related surface water reviews that there has been mining-induced change to aquatic habitat within the locality of the A series longwalls;
- Water quality measures sampled by Stantec were sometimes outside of default guidelines, likely due to catchment-scale influence unrelated to mining and localised impacts associated with fracturing induced changes in creek hydrology;
- The reduction in availability of aquatic habitat and expected associated loss of aquatic biota in Impact creeks, represent an impact to aquatic ecology associated with mining;
- The apparent absence of impacts to AUSRIVAS macroinvertebrate indices and the absence of changes in quantitative macroinvertebrate samples indicative of an impact suggests that when water is present, impacts to aquatic macroinvertebrates are not evident. When water returns to pools after rainfall, aquatic macroinvertebrates are likely able to recolonise this aquatic habitat fairly quickly;
- While all sampled Impact sites generally recorded lower AUSRIVAS Bands, SIGNAL2 scores, taxonomic richness and EPT richness than the control sites, this appears unrelated to mining.

12.4.3.1.2 TARP BMP1 – Aquatic Habitat and Macroinvertebrate Indicators (Stream Health)

Background

During this reporting period, impact sites TTH12, TTH13 and BRt6 aligned with a 'Normal Condition' in accordance with the BMP1 aquatic habitat and macroinvertebrate indicators (stream health) TARP in Autumn 2025.

A level 3 TARP trigger exceedance (TARP BMP1) was reported for sites TTHt9, TTH16 and TTHt17 in Autumn 2025 relating to a reduction in aquatic pool habitat being observed over four consecutive

sampling occasions. It should be noted that TTHt9 progressed from Level 2 to Level 3, whereas TTH16 and TTHt17 remained at Level 3 TARP Trigger from the previous monitoring period.

Further discussion of these triggers is provided in the Aquatic Monitoring Report for Autumn 2025 (Stantec, 2026a)

Actions and Responses Completed

Table 12-4 outlines the actions and responses that are required to be completed in accordance with a Level 1, 2 and 3 TARP trigger for aquatic habitat and macroinvertebrate indicators (stream health) (TARP BMP1), as well as how these actions and responses have been addressed.

Table 12-4 Actions and Responses for Level 2 and 3 TARP Trigger for Aquatic Habitat and Macroinvertebrate Indicators (stream health) (TARP BMP1)

Action / Responses from TARP BMP1	Tahmoor Coal response
Actions	
Level 1, 2 and 3 Trigger Continue monitoring and review of data as per monitoring program.	Bi-annual seasonal monitoring (Spring and Autumn) and review of data is ongoing according to the monitoring program. Unfortunately, due to financial issues Spring 2025 was not undertaken. Non-compliance reported to DPHI. However, bi-annual monitoring will be continued for Autumn 2026.
Level 1, 2 and 3 Trigger Undertake an investigation of BACI quantitative macroinvertebrate data to assess Level 1, 2 and 3 observations and determine if mining related or the response to environmental conditions (e.g. drought) within the catchment.	Not applicable for TTHt9 as aquatic habitat was absent and macroinvertebrate samples could not be collected due to dry conditions.
Level 1, 2 and 3 Trigger Discuss findings and obtain other relevant information from key specialists (e.g. subsidence monitoring results, surface water monitoring results, groundwater monitoring results).	Findings from the Autumn 2025 aquatic ecology monitoring were reviewed in conjunction with the 2025 Surface Water Review prepared by ATC Williams (**Appendix 9**), including relevant surface water, groundwater and subsidence monitoring information. **TTHt9:** ATC Williams (2025) concluded that water levels at TTHt9 are influenced by rainfall conditions and natural variability; however, the pool has exhibited an increased rate of water level recession compared with historical conditions. TTHt9 has been monitored since Spring 2023 and has remained dry during all monitoring events completed to date. **TTH16 & TTHt17 (Level 3 Re-occurrence):** The 2025 Surface Water Review concluded that these sites have experienced atypical declines in water level associated with mining-induced fracturing. At TTHt17, water level decline is considered to be the result of mining-induced fracturing in combination with prevailing climatic conditions. At TTH16, reduced pool persistence is associated with the diversion of surface flows through upstream fracture zones resulting from mine subsidence.
Level 1, 2 and 3 Trigger Consider and decide on reasonable and feasible options for remediation, where relevant (e.g. limestone cobble for pH management).	No corrective management actions are proposed as there are no actions that can currently be completed to correct water level decline.

Action / Responses from TARP BMP1	Tahmoor Coal response
	In accordance with C12 of SSD 8445 and as detailed in the Water Management Plan, a Watercourse Corrective Action Management Plan (WCAMP) will be prepared (if required) for watercourses damaged by subsidence impacts in consultation with relevant government agencies, as defined in the WMP. The WCAMP will be prepared and implemented (if required) at the cessation of subsidence movements associated with Tahmoor South mining.
Level 1, 2 and 3 Trigger Following investigation, any declines detected that are not attributable to mining impacts (e.g. are a result of environmental conditions or stochastic events) are to be considered 'normal condition' and are continued to be included in the ongoing development of the ecological monitoring dataset.	Not applicable to these sites.
Level 2 and 3 Trigger Consider increasing monitoring and review of data frequency where Level 2 or 3 has been reached and at other relevant sites, subject to land access.	Monitoring is completed bi-annually in line with AUSRIVAS monitoring protocols and collection of baseline data. As mining induced change has so far manifested in pool-drying, rather than water quality decline, there is limited value in increasing biological sampling frequency.
Level 2 and 3 Trigger Consider the inclusion of additional sites within impact area.	Additional AUSRIVAS sites downstream of areas of mining induced change observed, TTH13 (d/s) and TTH17 (d/s), have been included in the program since Autumn 2023 when impacts were first observed. These additional sites have been established as part of an adaptive monitoring approach to provide an indication of potential impacts downstream of areas of observed mining induced change. Due to the intermittent nature of the Teatree Hollow stream network and prevailing dry conditions, there is limited scope to include additional monitoring sites. Data from related program sites may be called upon as relevant, to assist in the interpretation of impacts. This has not been completed to date as the potential impacts to data have so far been primarily via pool drying/reduced flows rather than declining water quality.
Level 2 and 3 Trigger Review CMAs in light of findings from further investigations and consider additional reasonable and feasible options.	No corrective management actions are proposed as there are no actions that can currently be completed to correct water level decline. In accordance with C12 of SSD 8445 and as detailed in the Water Management Plan, a Watercourse Corrective Action Management Plan (WCAMP) will be prepared (if required) for watercourses damaged by subsidence impacts in consultation with relevant government agencies, as defined in the WMP. The WCAMP will be prepared and implemented (if required) at the cessation of subsidence movements associated with Tahmoor South mining.
Level 2 and 3 Trigger Review Biodiversity Management Plan and modify if necessary.	No further updates are required in line with the above outcomes.

Action / Responses from TARP BMP1	Tahmoor Coal response
Level 3 Trigger Increase monitoring frequency for sites where Level 3 has been reached and at corresponding reference sites, subject to land access.	Monitoring is completed bi-annually in line with AUSRIVAS monitoring protocols and collection of baseline data. As mining induced change has so far manifested in pool-drying, rather than water quality decline, there is limited value in increasing biological sampling frequency.
Level 3 Trigger Add additional monitoring sites as required.	Additional AUSRIVAS sites downstream of areas of mining induced change observed, TTH13 (d/s) and TTH17 (d/s), have been included in the program since Autumn 2023 when impacts were first observed. These additional sites have been established as part of an adaptive monitoring approach to provide an indication of potential impacts downstream of areas of observed mining induced change. Due to the intermittent nature of the Teatree Hollow stream network and prevailing dry conditions, there is limited scope to include additional monitoring sites on this creek system.
Level 3 Trigger Undertake a detailed investigation to assess if the change in behaviour is related to mining effects (e.g. whether there has been subsidence induced fracturing, other catchment changes, effects unrelated to mining or the prevailing climate).	A detailed investigation was undertaken by ATC Williams in 2025. The surface water review by ATC Williams (Refer to **Appendix 9**) concluded that these sites have experienced atypical declines in water level due to mining induced fracturing in combination with prevailing climatic conditions (TTHt17) and the diversion of surface flow via upstream fractures (TTH16).
Level 3 Trigger Undertake an investigation to determine if an exceedance of the performance measure is likely.	A detailed investigation was undertaken by ATC Williams (Refer to **Appendix 9**). No corrective management actions are proposed as there are no actions that can currently be completed to correct water level decline. In accordance with C12 of SSD 8445 and as detailed in the Water Management Plan, a Watercourse Corrective Action Management Plan (WCAMP) will be prepared (if required) for watercourses damaged by subsidence impacts in consultation with relevant government agencies, as defined in the WMP. The WCAMP will be prepared and implemented (if required) at the cessation of subsidence movements associated with Tahmoor South mining.
Responses	
Level 1, 2 and 3 Trigger Report trigger exceedance to DPHI and key stakeholders.	Completed as part of this report.
Level 1, 2 and 3 Trigger Report trigger exceedance and investigation outcomes in Six Monthly Subsidence Impact Report and Annual Review.	Completed as part of this report.
Level 1, 2 and 3 Trigger Provide DPHI and key stakeholders with proposed corrective management actions (CMAs) for consultation (e.g. limestone cobbles for pH management).	No CMAs are proposed.

Action / Responses from TARP BMP1	Tahmoor Coal response
Level 1, 2 and 3 Trigger Implement CMAs, subject to land access.	No CMAs are proposed.
Level 1, 2 and 3 Trigger Monitor and report on success of CMAs in Six Monthly Subsidence Impact Report and Annual Review.	No CMAs are proposed.
Level 1, 2 and 3 Trigger Continue monitoring to determine if a TARP trigger level will occur.	Bi-annual seasonal monitoring (Spring and Autumn) and review of data will be continued according to the monitoring program.
Level 2 and 3 Trigger Provide findings of CMA review to DPHI and key stakeholders for consultation.	No CMAs are proposed.
Level 2 and 3 Trigger Implement additional CMAs, subject to land access.	No CMAs are proposed.
Level 2 and 3 Trigger Advise DPHI and key stakeholders of any required amendments to Biodiversity Management Plan.	No further updates are required in line with the above outcomes.
Level 2 and 3 Trigger Continue monitoring to determine if a Level 3 TARP trigger will occur.	Continue monitoring and review of data as per existing monitoring program.
Level 3 Trigger If it is concluded that pools/aquatic habitat have been damaged by subsidence impacts: • Offer site visit with DPHI and key stakeholders. • If relevant, notify Commonwealth DCCEEW of any predictions of an exceedance of a performance measure within two business days. • Develop a Rehabilitation Management Plan in consultation with DPHI and key stakeholders. • Implement Rehabilitation Management Plan, subject to land access. • Continue monitoring to determine if an exceedance of the performance measure will occur.	Tahmoor Coal extends an offer of a site visit to DPHI to view sites where a new Level 3 TARP trigger for Stream Health (BMP1) have occurred (TTHt9). A site visit invitation letter will be sent to DPHI and stakeholders following the submission of this AEMR. A site visit was offered during the reporting period to Australian Wildlife Sanctuary and National Trust in relation to Level 3 TARP triggers of TARP BMP1 (stream Health) at sites TTHt17 and TTH16. This offer was extended via letter dated 13 August 2025. In accordance with C12 of SSD 8445 and as detailed in the WMP, a Watercourse Corrective Action Management Plan (WCAMP) will be prepared (if required) for watercourses damaged by subsidence impacts in consultation with relevant government agencies, as defined in the WMP. The WCAMP will be prepared and implemented (if required) at the cessation of subsidence movements associated with Tahmoor South mining. Monitoring is ongoing as per monitoring program outlined in the Biodiversity Management Plan.

Proposed Actions and Responses

The current monitoring program will continue in accordance with the LW S1A-S6A Biodiversity Management Plan. The next update will be provided as part of the next reporting requirement.

12.4.3.2 Terrestrial Ecology

The terrestrial ecology monitoring program for LW S1A-S6A has been designed to monitor subsidence-induced impacts on terrestrial ecology, including riparian vegetation, threatened

ecological communities (TECs), threatened flora and amphibian populations. The program incorporates a Before-After-Control-Impact (BACI) design to identify ecological changes associated with mine subsidence by comparing trends at control and impact sites before and after mining activities. Monitoring undertaken during baseline and operational phases includes:

- Floristic surveys within established vegetation monitoring plots for riparian vegetation, TECs and threatened flora species;
- Vegetation integrity assessments;
- Photo-point monitoring; and
- Amphibian monitoring along established transects, including:
    - Spotlighting;
    - Call playback;
    - Listening for diagnostic frog calls; and
    - Tadpole identification.

12.4.3.3 Overview of Monitoring Results - Amphibian Monitoring

Amphibian monitoring for Autumn 2025 was conducted by Stantec between 29 May and 20 June 2025. A total of nine locations were sampled for amphibians, including four impact sites (i01, i02, i03 and i09) and five control sites (c04, c05, c06, c07 and c08). The locations of monitoring sites are illustrated in **Figure 12-9**.

Amphibian monitoring targeted two threatened frog species, the Giant Burrowing Frog (*Heleioporus australiacus*) and the Red-crowned Toadlet (*Pseudophryne australis*). The following results were observed during this monitoring period:

- Rainfall prior to the survey period provided suitable water availability within monitored waterways during the survey program.
- No threatened frog species, including Red-crowned Toadlet (Pseudophryne australis) and Giant Burrowing Frog (Heleioporus australiacus), were detected during Autumn 2025. Neither species has been detected during the life of the monitoring program.
- Habitat suitability for these species continues to be influenced by factors including aquatic predators, climatic variability, altered hydrological conditions and habitat availability.
- Autumn 2025 surveys recorded 88 individual amphibians across four species.
- Amphibian abundance was higher at impact sites than control sites during the monitoring period.
- Statistical analysis did not identify any significant impact-related changes in amphibian assemblages. Differences observed were primarily associated with seasonal variability rather than mining-related disturbance and occurred similarly at impact and control sites over time.

12.4.3.4 TARP BMP2 – Amphibian Populations

During this reporting period, there have been no triggers under this TARP.

12.4.3.5 Overview of Monitoring Results - Riparian Vegetation

Riparian vegetation monitoring for Autumn 2025 was conducted by Stantec between 29 May and 20 June 2025. A total of nine locations were sampled for riparian vegetation, including four impact sites (i01, i02, i03 and i09) and five control sites (c04, c05, c06, c07 and c08). The locations of monitoring sites are illustrated in **Figure 12-9**.

The following results were observed during the Autumn 2025 monitoring period:

- Mean native species richness at all four impact sites remained within or above baseline ranges and continued an overall increasing trend.
- Between Autumn 2023 and Autumn 2025, mean native species richness increased by 20.2% at impact sites, while a decline of 18.98% was recorded at control sites.
- Native vegetation cover increased between Autumn 2024 and Autumn 2025 at both control and impact sites, with mean native vegetation cover remaining higher at the impact sites.
- A total of 27 exotic species were recorded across all monitoring sites during Autumn 2025, including five high-threat weed species.
- Mean exotic vegetation cover remained low and generally stable across monitoring locations.
- Vegetation Integrity (VI) scores ranged from 38.8 to 75.7 at impact sites and from 43.1 to 67.7 at control sites.
- VI scores indicate an overall improvement in vegetation condition since the baseline monitoring period across both impact and control sites.
- Statistical analysis (PERMANOVA and PCO) identified no evidence of existing or developing mining-related impacts on vegetation assemblages at impact sites.
- Variations in species composition, litter cover and woody debris remain consistent with expected seasonal variability and other natural environmental factors.

12.4.3.6 TARP BMP3 – Riparian Vegetation

During this reporting period, there have been no triggers under this TARP.

12.4.3.7 Overview of Monitoring Results – Threatened Species, Threatened Populations and Endangered Ecological Communities

Threatened Flora Species

Monitoring of threatened flora was undertaken by Stantec between 29 May and 20 June 2025. Threatened flora species were monitored at six permanent monitoring plots, comprising three impact sites (TF4, TF5 and TF6) and three control sites (TF1, TF2 and TF3). The locations of monitoring sites are illustrated in **Figure 12-9**.

The six threatened flora monitoring plots were established in September 2022 to monitor populations of Pomaderris brunnea (Brown Pomaderris), Persoonia bargoensis (Bargo Geebung) and Grevillea parviflora subsp. parviflora (Small-flowered Grevillea).

Key findings from the Autumn 2025 monitoring period included:

- The number of threatened flora individuals recorded across both impact and control sites remained generally stable.
- Pomaderris brunnea and Grevillea parviflora subsp. parviflora were more abundant at control sites than impact sites, which is generally consistent with previous monitoring periods.
- Persoonia bargoensis remained more abundant at impact sites than control sites.
- Minor fluctuations in plant abundance between monitoring periods continue to be observed and are considered consistent with natural environmental variability.
- Most monitored populations were observed to be in good condition, with evidence of flowering and recruitment at several locations.
- No evidence was identified to indicate that mining activities have adversely affected threatened flora populations.

Threatened Ecological Communities

TEC monitoring was undertaken by Stantec during the Autumn 2025 monitoring period at six permanent monitoring plots, comprising three impact plots (TEC4, TEC5 and TEC6) and three control plots (TEC1, TEC2 and TEC3). The monitored vegetation community consists of PCT 3321 Cumberland Shale-Sandstone Ironbark Forest, which is commensurate with the Critically Endangered Shale Sandstone Transition Forest in the Sydney Basin Bioregion.

The following results were observed:

- Autumn 2025 VI scores ranged from 63.8 to 74.6 at control sites and from 59.1 to 64.8 at impact sites.
- VI scores increased at four plots (TEC2, TEC4, TEC5 and TEC6) since the previous monitoring period.
- TEC1 and TEC3 recorded minor decreases in VI score when compared with Spring 2024.
- Overall, Autumn 2025 TEC VI scores remained within the range observed during previous monitoring events.
- No obvious trends indicating subsidence-related impacts were identified.
- No visual signs of vegetation dieback or environmental stress attributable to mining activities were observed during the monitoring period.

12.4.3.7.1 TARP BMP4 – Threatened Species, Threatened Populations and Endangered Ecological Communities

During this reporting period, there have been no triggers under this TARP.

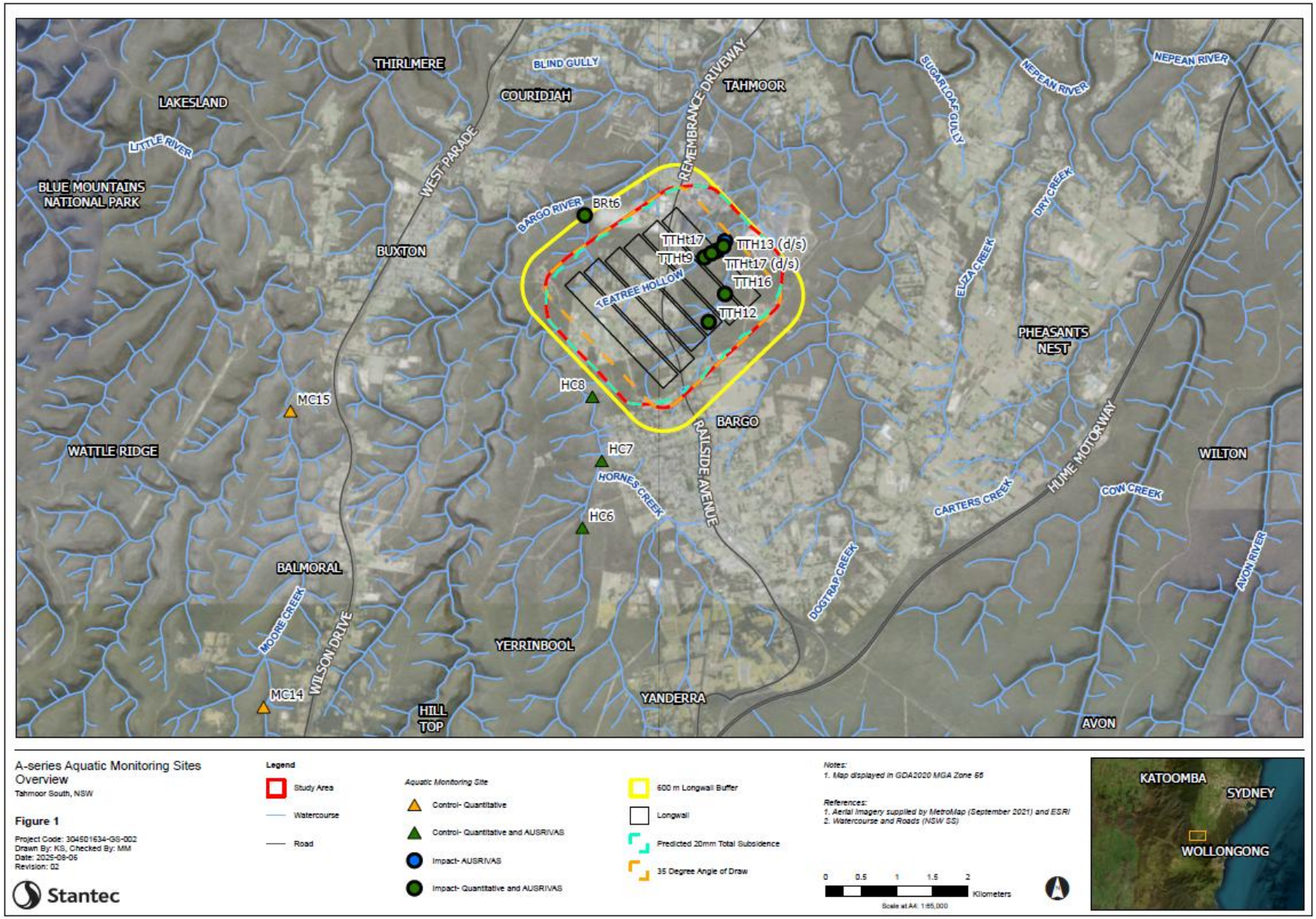


Figure 12-8 LW S1A-S6A Aquatic Ecology Monitoring Locations (source: Stantec, 2026a)

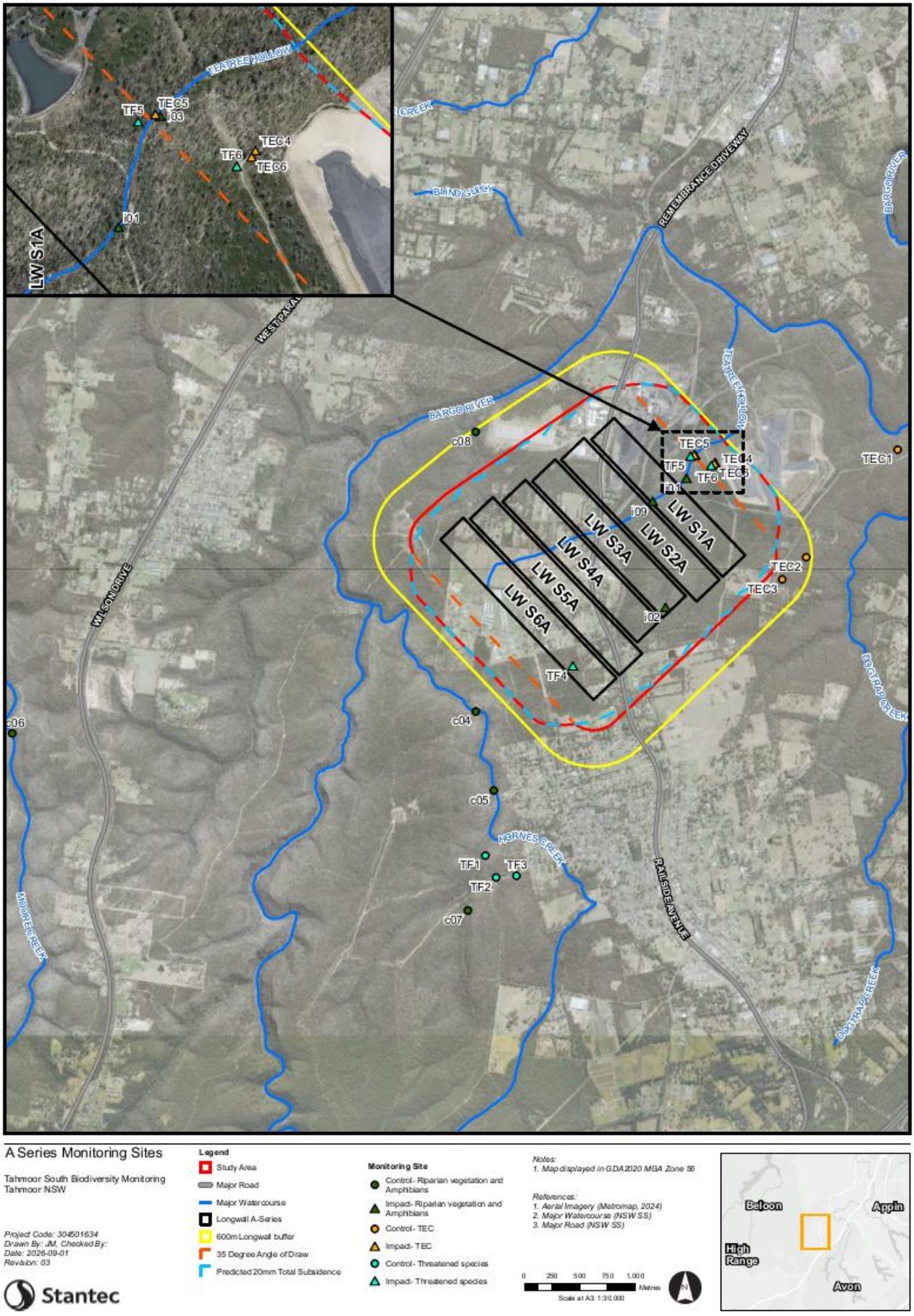


Figure 12-9 LW S1A-S6A Riparian Vegetation and Amphibian Monitoring Locations (source: Stantec, 2026b)

12.4.4 Further Improvements

Ecological survey assessments will continue to be undertaken as required to manage compliance and assess potential impact across all Tahmoor Coal mining domains and in accordance with the Redbank and Myrtle Creek Corrective Management Action Plan, the LW S1A-S6A Biodiversity Management Plan, and preparation for the Tahmoor South B series longwalls.

12.5 Heritage Monitoring

The LW S1A-S6A Heritage Management Plan was prepared to manage the potential environmental consequences of LW S1A-S6A extraction on Aboriginal heritage and historical heritage sites and values in accordance with Condition C8 of SSD 8445.

The following sections summarise the observations made during the reporting period for Aboriginal and historical heritage items.

12.5.1 Aboriginal Heritage

12.5.1.1 Overview of Monitoring Results

During this reporting period, the Tahmoor South LW S1A-S6A Heritage Management Plan has been implemented to monitor subsidence impacts on the rockshelter Teatree Hollow 2013.1 (AHIMS 52-2-4471) (Error! Reference source not found.). LW S3A was completed in December 2024, the Aboriginal heritage monitoring of this rockshelter requires the following monitoring during post-mining:

- Visual inspection by archaeologist with Registered Aboriginal Parties (RAPs) at the completion of LW S1A, S2A, S3A and S4A. An end of panel inspection for LW S3A was completed on 3 December 2024.

The LW S3A end of panel inspection of the rockshelter completed by archaeologist with RAPs on 3 December 2024 did not identify any observable impacts such as cracks, exfoliation, or collapse, as a result of subsidence or other activities. Further, the floor of the rockshelter showed no evidence of recent rockfall or other moved material that may suggest collapse or movement has occurred.

It is noted that the artefact scatter Remembrance Drive 2013.1 (AHIMS 52-2-3968) and isolated find TC14-2-19 (AHIMS 48-2-0275) were also assessed in the LW S1A-S6A Heritage Management Plan, however no pre-mining, during mining or post-mining monitoring is required for these sites.

As per the LW S1A-S6A Heritage Management Plan, no further inspections were required during the reporting period.

12.5.1.2 TARP HMP1 – Aboriginal Cultural Heritage Sites

During this reporting period, there have been no triggers under this TARP.

This information has been retracted
- For more information contact Tahmoor Coal

SIMEC
Level 28, 88 Phillip Street,
Sydney NSW 2000
Legal entity name goes here ABN: 00 000 000 000

T: +61 (0) 2 0000 0000
E: xxxxxxx.xxxxxxx@simecgfg.com
simec.com

MEMBER OF GFG ALLIANCE

12.5.2 Historical Heritage

12.5.2.1 Overview of Monitoring Results

During this reporting period, the Tahmoor South LW S1A-S6A Heritage Management Plan was implemented to monitor subsidence impacts for the following historical heritage items (**Figure 12-11).**

- Wirrimbirra Sanctuary (Australian Wildlife Sanctuary):
  - Various monitoring as per the Australian Wildlife Sanctuary Management
  - Visual inspection by a heritage consultant at the completion of LW S5A
- Bargo Railway Bridge North (Wellers Road Overbridge) and Bargo Railway Viaduct:
  - Various monitoring as per the Main Southern Railway Management Plan and the Wellers Road Overbridge Management Plan
  - Visual inspection by a heritage consultant at the completion of LW S6A
- Bargo Cemetery:
  - Various monitoring as per the Wollondilly Shire Council Management Plan
  - Visual inspection by a heritage consultant at the completion of LW S6A
- Picton Weir:
  - Various monitoring as per the Picton Weir Management Plan
- Tahmoor Colliery (Tahmoor Mine Site):
  - Various monitoring as per the Tahmoor Mine Site Management Plan and additional monitoring commitments as outlined in an email to the NSW Resources Regulator on 6 May 2024 (available on request).
- Great Southern Road (partial):
  - Various monitoring as per the Main Southern Railway Management Plan

LW S3A was completed in December 2024 and no longwall extraction occurred during the reporting period.

During the reporting period, no observations of impacts to heritage structures were made at the Australian Wildlife Sanctuary, Wellers Road Overbridge and Bargo Railway Viaduct, Bargo Cemetery, Picton Weir or Great Southern Road and Tahmoor Mine site.

12.5.2.2 TARP HMP2 – Historical Heritage Items

During this reporting period, there have been no triggers under this TARP.

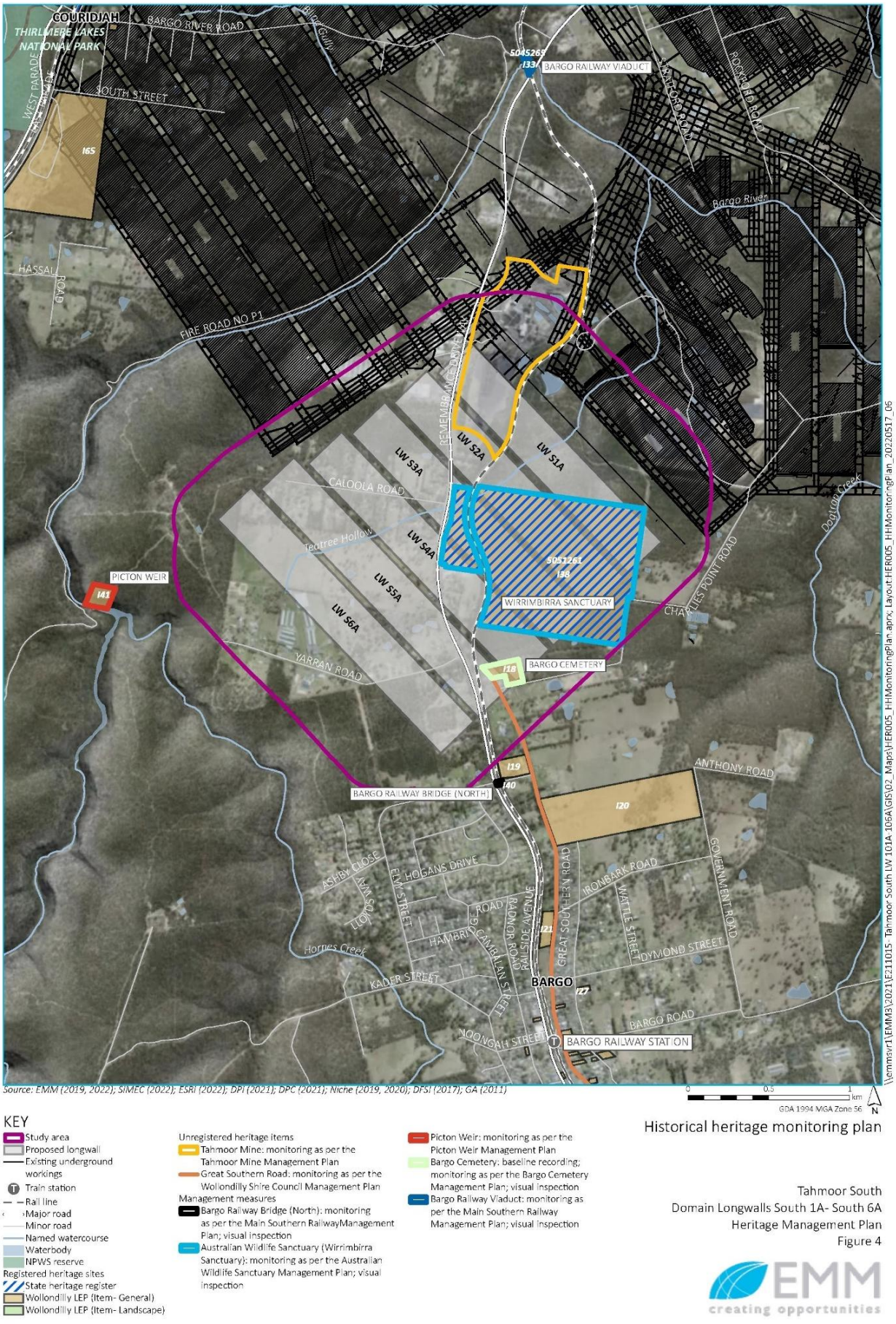


Figure 12-11 Historical Heritage Sites in the LW S1A-S6A Study Area and Surrounds (Source LW S1A-S6A Heritage Management Plan)

12.5.3 Further Improvements

Aboriginal cultural due diligence assessments will continue to be undertaken by qualified Aboriginal cultural consultants as required to identify items of significance and propose mitigation measures to ensure compliance with statutory requirements across all mining domains. In addition, the Tahmoor South Aboriginal heritage monitoring program will continue to be implemented in accordance with the LW S1A-S6A Heritage Management Plan. Tahmoor Coal aims to maintain valued working relationships with local RAPs throughout the mining process.

Historical heritage due diligence assessments will continue to be undertaken by qualified consultants as required to identify items of significance and propose mitigation measures to ensure compliance with statutory requirements across all mining domains. In addition, the Tahmoor South Domain historical heritage monitoring program will continue to be implemented in accordance with the LW S1A-S6A Heritage Management Plan.

12.6 Built Features Monitoring

12.6.1 Western Domain

The Tahmoor Western Domain Residual Subsidence Monitoring Plan has been implemented following the extraction of Longwall West 1 to West 4 to monitor residual subsidence on infrastructure owned by Wollondilly Shire Council (roads), ARTC (rail infrastructure), Transport Heritage NSW (rail infrastructure) and Transport for NSW (Victoria Bridge). Monitoring of the above assets was completed during the reporting period.

Further details of subsidence data and residual subsidence movements relating to the above are provided in the Quarterly Western Domain Residual Subsidence Monitoring Reports (**Appendix 12**)

12.6.1.1 Overview of Monitoring Results

12.6.1.1.1 Main Southern Railway

Continuous GNSS monitoring was conducted during the monitoring period along the Main Southern Railway at the Picton Tunnel (site 1), Picton Viaduct (sites 0 and 2), 88.78 km (site 26) and 88.60 km (site 27) as per the Residual Subsidence Monitoring Plan. The results indicated very minor to minor changes in subsidence at all monitoring sites, with all changes remaining below the trigger level of 20 mm change in subsidence.

Small changes in distance were recorded between GNSS sites 0 and 2 across the Picton Viaduct. While the cumulative change in distance exceeded the 5 mm trigger level during the monitoring period, an additional Precision 2D survey undertaken on 11 June 2025 confirmed no material change in the structure and ongoing monitoring indicates the observed movements remain stable.

GNSS site 27 at 88.60 km has remained offline since 15 June 2025 following theft of the solar panel. The unit is subject to maintenance and replacement works, with the last recorded monitoring data indicating very minor changes in subsidence and no exceedance of trigger levels.

12.6.1.1.2 Transport Heritage NSW - Picton Mittagong Loop Line

Continuous GNSS monitoring was conducted during the monitoring period along the Picton Mittagong Loop Line, including at the 87.850 km culvert (site 7), above LW W1 at 88.550 km (site 9), above LW W2 at 88.110 km (site 8), 89.000 km (site 10), 89.629 km (site 11) and 89.440 km (site 19)

in accordance with the Residual Subsidence Monitoring Plan. The results indicated very minor changes in subsidence at all monitoring locations, with no observed impacts to rail infrastructure.

GNSS site 10 at 89.000 km recorded intermittent exceedances of the 20 mm subsidence trigger during late 2024 and early 2025. Following review by the Independent Monitoring Group (IMG) on 16 May 2025, it was agreed that the trigger level should be increased to 40 mm due to the extremely low rates of ongoing movement and the absence of any adverse impacts on the railway. Subsequent monitoring through Reports R06, R07 and R08 showed very small ongoing movements, with changes in subsidence remaining below trigger levels. Transport Heritage NSW was notified of the assessment and the revised management approach.

During the most recent reporting period, GNSS site 11 at 89.629 km intermittently exceeded the 20 mm subsidence trigger. The observed movements were very minor, with no evidence of adverse impacts to the Picton Mittagong Loop Line. Ongoing monitoring will continue in accordance with the Residual Subsidence Monitoring Plan.

In accordance with the Western Domain Residual Subsidence Management Plan, the following measures were implemented in response to trigger exceedances at monitoring locations within the Picton Mittagong Loop Line corridor:

- Notification to the asset owner (Transport Heritage NSW).
- Review of monitoring data by the Independent Monitoring Group (IMG).
- Trigger level at GNSS Site 10 increased by 20 mm (step change from 20 mm to 40 mm) and continued monitoring implemented.
- Continued monitoring of Site 11 to assess ongoing trends and confirm there are no impacts to rail infrastructure.

12.6.1.1.3 Transport for NSW – Victoria Bridge

Continuous GNSS monitoring was conducted during the monitoring period on the eastern abutment (site 3) and western abutment (site 25) of Victoria Bridge over Stonequarry Creek as per the Residual Subsidence Monitoring Plan. The results indicated minor to very minor changes in subsidence and distance, with all measured changes remaining below the relevant trigger levels.

Very little change has been observed across Victoria Bridge during the monitoring period covered by Reports R05 to R08. GNSS monitoring, six-monthly 2D and 3D surveys, laser distance meter monitoring and bridge gap measurements all confirmed that deformation rates remain very low and generally stable. Changes in distance between GNSS sites 3 and 25 remained below the 5 mm trigger level and no immediate concerns regarding bridge performance or structural integrity were identified.

It was noted that GNSS unit site 25 on the western abutment was offline during late 2024 and was repaired on 7 January 2025. Subsequent monitoring confirmed stable performance of the unit with only very minor ongoing movement recorded.

12.6.1.1.4 Centreline of Longwall West 4

Continuous GNSS monitoring was conducted during the monitoring period on the centreline of LW W4 (site 24) as per the Residual Subsidence Monitoring Plan. The results indicate a continuing trend of residual subsidence, with rates of movement having progressively reduced to very low levels since November 2023. Total subsidence at site 24 was approximately 735 mm at the end of the latest reporting period. Very little change was recorded during the reporting period.

It was noted that the GNSS unit produced erratic results during March 2024 due to solar flare-related interference. The GNSS chip was replaced on 16 April 2024 and monitoring data since replacement indicates stable operation of the unit.

12.6.1.2 Western Domain Residual Subsidence TARP

During the monitoring period, the following TARP triggers were recorded under the Western Domain Residual Subsidence Monitoring Plan:

- GNSS Site 10 (PMLL at 89.000 km) recorded changes in subsidence that exceeded the 20 mm trigger level intermittently between 30 October 2024 and 31 March 2025. Following review by the Infrastructure Management Group (IMG), it was determined that the observed movements were occurring at extremely low rates and were not resulting in adverse impacts to the Picton-Mittagong Loop Line. As a result, the trigger level was increased by 20 mm (from 20 mm to 40 mm) and monitoring continued.
- GNSS Site 11 (PMLL at 89.629 km) recorded changes in subsidence that intermittently exceeded the 20 mm trigger level during the October to December 2025 reporting period. Monitoring data indicated that movements remained minor and no adverse impacts to rail infrastructure were observed. Monitoring was continued in accordance with the Residual Subsidence Monitoring Plan.

Following review of the monitoring data by the IMG, the following actions and measures were implemented in accordance with the Western Domain Residual Subsidence Monitoring TARP:

- Notification to the asset owner (Transport Heritage NSW).
- Review of monitoring results by the Infrastructure Management Group (IMG).
- Increase the Site 10 trigger level by 20 mm (from 20 mm to 40 mm) and continue monitoring.
- Continue monitoring to confirm that movement rates remain low and that no adverse impacts develop.

12.6.2 Tahmoor South Domain

The LW S1A-S6A Built Features Management Plan and associated sub-plans were prepared to manage the potential environmental consequences of LW S1A-S6A extraction on built features in accordance with Condition C8 of SSD 8445.

During this reporting period, the LW S1A-S6A Subsidence Monitoring Program was implemented to monitor residual subsidence impacts on infrastructure owned by Wollondilly Shire Council (roads, bridges and culverts), ARTC (rail infrastructure), Sydney Water (potable water infrastructure and sewer infrastructure), Endeavour Energy (electrical infrastructure), Jemena (gas infrastructure), Telstra (telecommunications infrastructure), NBN (telecommunications infrastructure), TPG (telecommunications infrastructure) and private property owners following completion of Longwall S3A extraction in December 2024. No further mining occurred within the Tahmoor South Domain during 2025, with monitoring focused on the assessment and management of residual ground movements. Mining of Longwall S4A is expected to commence in December 2026.

Weekly reviews of subsidence monitoring results were undertaken during periods of active subsidence. In addition, regular reports were prepared for key built features including the Main Southern Railway, Tahmoor Mine Site, Bargo Petroleum (3030 Remembrance Drive), MKD Machinery, Tahmoor Garden Centre, Wollondilly Anglican College and the Australian Wildlife Sanctuary in accordance with the applicable management plans. Following the completion of LW S3A and due to the cessation of mining, monitoring of several built features ceased progressively during 2025 where rates of change had reduced to low levels and in consultation with relevant stakeholders and infrastructure owners.

The following sections summarise the observations made during the reporting period for built features, as well as actions and responses completed relating to any TARP triggers.

12.6.2.1 Main Southern Railway

12.6.2.1.1 Overview of Monitoring Results

Following the completion of LW S3A in December 2024, monthly surveys have been conducted on the Main Southern Railway. Monthly Subsidence Status Reports have been prepared for the Main Southern Railway during active subsidence, which summarise monitoring and inspection results for the railway track, early warning monitoring, embankment and culvert at 100.425 km (including Water Main crossing at 100.380 km), cutting at 100.310 km, embankment and culvert at 100.121 km, cutting at 99.690 km, embankment and culvert at 99.338 km, cutting at 99.165 Km, embankment and culvert at 99.035 km, embankment and culvert at 98.739 km, embankment and culvert at 98.445 km, Bargo River Railway Viaduct at 96.256 km, Remembrance Drive Bridge over Bargo River at 96.385 km, Bargo River Road Overbridge at 96.049 km, and Wellers Road Overbridge at 101.162 km.

The final survey for LW S3A during the reporting period was conducted on 16 December 2025. Minor residual subsidence continued to be measured, with a maximum change in subsidence of 48 mm recorded during 2025. Rates of change in ground strains and vertical alignment reduced to very low levels during the year. A visual inspection of the Bargo River Railway Viaduct undertaken on 20 January 2025 did not identify any issues. No impacts were observed to the Main Southern Railway during 2025. The Main Southern Railway remained safe and serviceable throughout the reporting period.

12.6.2.1.2 Main Southern Railway TARP

During this reporting period, there have been no triggers under this TARP.

12.6.2.2 Local Roads and Bridges

12.6.2.2.1 Overview of Monitoring Results

Surveys have been conducted on local roads and bridges following completion of LW S3A in accordance with the Wollondilly Shire Council Management Plan, Main Southern Railway Management Plan, Jemena Management Plan, Sydney Water Potable Water Management Plan, Sydney Water Sewer Management Plan and Telecommunication Management Plan. Observations are summarised in MSEC Annual Subsidence Monitoring Report MSEC 1430 R36 (**Appendix 11**).

Remembrance Drive

Remembrance Drive experienced its most active period of subsidence during the extraction of LW S3A, with rates of change reducing significantly following completion of extraction in December 2024. During 2025, minor residual subsidence continued to be measured, with a maximum change in subsidence of 12 mm recorded between surveys. The observed subsidence profile remains relatively smooth, with compressive strains broadly developed above the central section of LW S3A. Rates of change reduced to low levels throughout the reporting period as seen in **Figure 12-12** (for further information refer to **Appendix 11**).

The previously observed non-conventional compressive strain and associated impacts at locations including Pegs R46 to R48 and Pegs R54 to R55 remained stable during the reporting period, with only minor changes observed during the final surveys (refer to **Figure 12-13**). No new mining-related impacts were observed along Remembrance Drive during 2025.

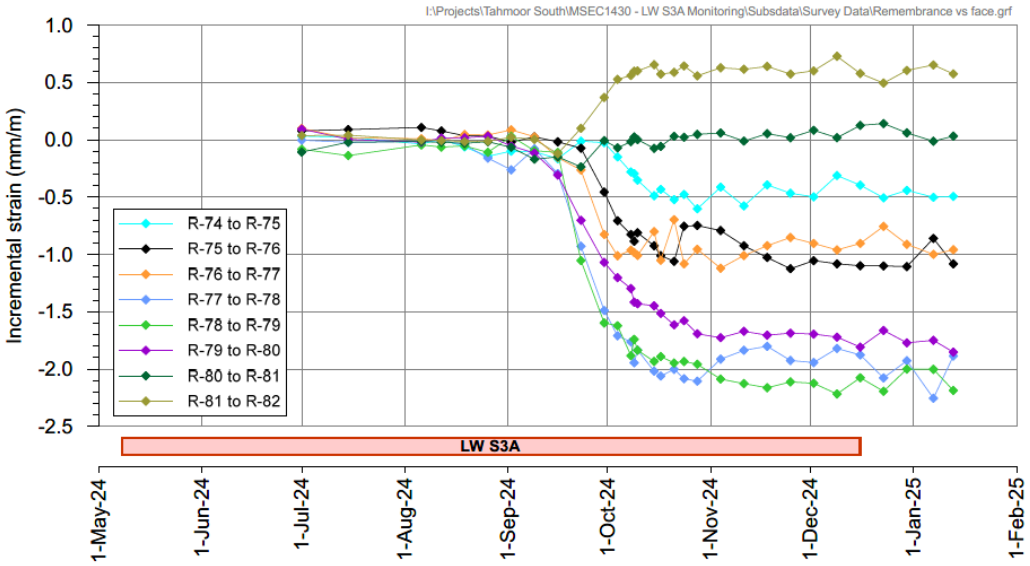


Figure 12-12: Observed development of ground strain along Remembrance Drive above central section of LW S3A over time

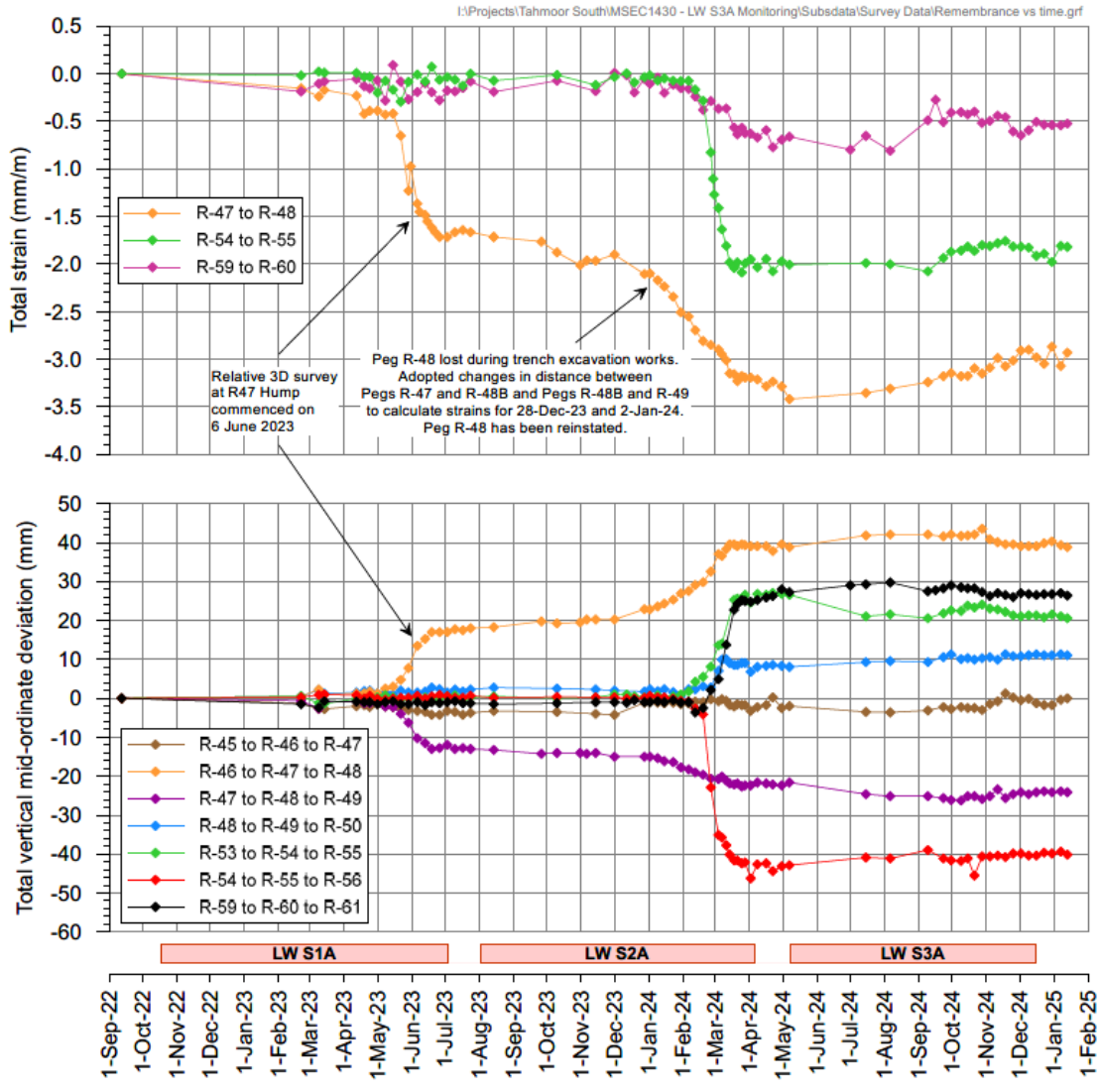


Figure 12-13: Observed development of ground strain and changes in vertical alignment at previously observed impact sites along Remembrance Drive

Charlies Point Road

Ground surveys were conducted along Charlies Point Road, with the final survey for LW S3A completed on 7 January 2025. Minor residual subsidence was measured during the reporting period, with a maximum change in subsidence of 16 mm recorded during 2025. Visual inspections did not identify any issues or impacts, and no mining-related impacts were observed at the time of the final survey or reported during the remainder of 2025.

Caloola Road

Caloola Road experienced its most active period of subsidence during extraction of LW S3A, with rates of change reducing significantly following completion of mining in December 2024. A final survey was conducted on 14 January 2025, with very minor residual subsidence of up to 2 mm measured during the reporting period. The observed subsidence profile remains relatively smooth, with only minor ground strains observed.

No impacts were observed during the final survey, and no mining-related impacts were reported during the remainder of 2025. Visual inspections did not identify any issues associated with subsidence

Yarran Road

Ground surveys were conducted along Yarran Road, with the final survey for LW S3A completed on 14 January 2025. Very minor residual subsidence was measured during the reporting period, with a maximum change in subsidence of 5 mm recorded during 2025. Visual inspections did not identify any issues or impacts, and no mining-related impacts were observed during the reporting period.

Great Southern Road

Ground surveys were conducted along Great Southern Road, with the final survey for LW S3A completed on 9 January 2025. Minor residual subsidence was measured during the reporting period, with a maximum change in subsidence of 26 mm recorded during 2025. The reported change was associated with a survey mark that may have been disturbed prior to the final survey. Visual inspections did not identify any issues or impacts and no mining-related impacts were observed during the reporting period.

Bridges

No bridge surveys occurred in 2025. Visual inspections of Remembrance Drive Bridge and Bargo River Road overbridge on 20 January 2025 did not identify any issues.

12.6.2.2.2 Wollondilly Shire Council TARP

During this reporting period, there have been no triggers under this TARP.

12.6.2.3 Potable Water Infrastructure

12.6.2.3.1 Overview of Monitoring Results

Compressive ground strains developed adjacent to the 450 mm diameter DICL water main at the Remembrance Drive Embankment at Caloola Road, where the pipeline crosses Teatree Hollow. The observed subsidence profiles remained relatively smooth along the crest and toe on both sides of the embankment, with compressive strains developing along all five survey lines. Closure was concentrated between the crest and toe of the embankment, particularly on the northbound side. The final absolute 3D survey was conducted on 15 January 2025, with an additional local 3D survey completed on 21 January 2025 to confirm that rates of change had reduced to low levels.

Minor changes continued to be recorded across the four Gibault joints installed on the Sydney Water water main at the Caloola Road crossing. Monitoring indicated that rates of change had

reduced to low levels by January 2025. Similarly, displacement sensors installed across the Gibault joints at the previously identified impact site between Pegs R47 and R48 recorded only very minor changes, with rates of closure reducing to very low levels by the completion of monitoring.

Tahmoor Coal regularly consulted with Sydney Water throughout the monitoring period to review survey results and observed movements. Following confirmation that rates of change had reduced to low levels, monitoring for LW S3A ceased in January 2025 in accordance with the agreed management process. Weekly surveys continued along the Main Southern Railway where the Sydney Water potable water main crosses beneath the railway until December 2025, with only minor changes observed as expected.

No impacts to Sydney Water potable water infrastructure were observed during the reporting period.

12.6.2.3.2 Sydney Water Potable Water TARP

During this reporting period, there have been no triggers under this TARP.

12.6.2.4 Sewer Infrastructure

12.6.2.4.1 Overview of Monitoring Results

Surveys were conducted along Remembrance Drive and the Remembrance Drive Embankment at Caloola Road during periods of active subsidence and residual ground movement associated with LW S3A. Remembrance Drive experienced its most active period of subsidence during extraction of LW S3A, with rates of change reducing to low levels following completion of mining in December 2024. Minor residual subsidence and minor changes in compressive strain were measured at previously identified locations, including areas above LW S3A, during the final surveys completed in January 2025. No concerns were identified and monitoring confirmed that rates of change had reduced to low levels.

No impacts to Sydney Water sewer infrastructure were observed during the reporting period.

12.6.2.4.2 Sydney Water Sewer TARP

During this reporting period, there have been no triggers under this TARP.

12.6.2.5 Gas Infrastructure

12.6.2.5.1 Overview of Monitoring Results

Weekly surveys were conducted along Remembrance Drive and the Remembrance Drive Embankment at Caloola Road during periods of active subsidence associated with LW S3A. Following completion of LW S3A extraction in December 2024, monitoring continued during the residual subsidence period, with the final surveys and inspections completed on 21 January 2025. Monitoring confirmed that rates of change had reduced to low levels.

Prior to the influence of LW S3A, the Jemena gas pipeline was exposed along the section of the Remembrance Drive embankment where it crosses Teatree Hollow to facilitate monitoring and management of potential compressive ground strains. During active subsidence, the exposed pipeline responded to the observed compressive strains by bowing outward within the trench. In consultation with Jemena, the trench was widened in October 2024 and the pipeline position was subsequently adjusted in December 2024 and January 2025 to manage pipeline stresses.

Engineering assessments completed following these adjustments confirmed that pipeline stresses had reduced and were within acceptable limits. Tahmoor Coal met regularly with Jemena throughout the monitoring period to review monitoring results and management measures. The

exposed section of pipeline was backfilled in February 2025 following completion of monitoring activities.

No impacts to Jemena gas infrastructure were observed during the reporting period. The Jemena gas pipeline remained safe and serviceable throughout the monitoring period.

12.6.2.5.2 Jemena TARP

During this reporting period, there have been no triggers under this TARP.

12.6.2.6 Electrical Infrastructure

12.6.2.6.1 Overview of Monitoring Results

Ground surveys and inspections of critical Endeavour Energy power poles were conducted during periods of active subsidence in accordance with the Electrical Infrastructure Management Plan.

Following completion of LW S3A extraction in December 2024, monitoring continued during the residual subsidence period, with the final ground surveys of critical power poles completed on 20 January 2025. Monitoring confirmed that rates of ground movement had reduced to low levels and no concerns were identified for electrical infrastructure.

No impacts to Endeavour Energy electrical infrastructure were observed during the reporting period.

12.6.2.6.2 Endeavour Energy TARP

During this reporting period, there have been no triggers under this TARP.

12.6.2.7 Telecommunications Infrastructure

12.6.2.7.1 Overview of Monitoring Results

Weekly surveys were conducted along the optical fibre cable within the Main Southern Railway corridor during periods of active subsidence associated with LW S3A. Localised non-conventional subsidence developed near 99.560 km and 99.620 km during 2024, resulting in compressive ground strains and minor reductions in signal performance being detected through Telstra's OTDR monitoring system. In response, sections of the buried optical fibre cable were exposed and adjustments were undertaken to relieve stresses and deformations within the cable. These management measures resulted in improvements in signal performance and maintained the integrity of the telecommunications infrastructure.

Following completion of LW S3A extraction in December 2024, surveys continued along the Main Southern Railway during 2025 to monitor residual ground movements. The final survey for the reporting period was completed on 16 December 2025. Minor residual subsidence was measured, with a maximum increase in subsidence of 48 mm recorded during 2025. Rates of change in ground strain and vertical alignment at the previously identified locations of interest reduced to very low levels throughout the reporting period.

Telstra advised on 14 January 2025 that there was no indication of mining-induced loss being observed from OTDR monitoring. No impacts to telecommunications infrastructure were observed during the reporting period and the optical fibre cable remained safe and serviceable.

12.6.2.7.2 Telecommunication TARPs

During this reporting period, there have been no triggers under this TARP.

12.6.2.8 Built Structures (General)

12.6.2.8.1 Overview of Monitoring Results

Visual inspections ceased in January 2025 for farm structures (farm buildings, sheds, tanks, fences) and residential structures (houses, swimming pools, associated residential structures, fences, pavement) following the completion of LW S3A in December 2024.

During the reporting period and the mining of LW S3A, no triggers were exceeded at farm structures or residential structures.

A summary of observations of farm dams is provided in **Section 12.10.1.3.**

12.6.2.8.2 Built Structures TARP

During this reporting period, there have been no triggers under this TARP.

12.6.2.9 Bargo Cemetery

12.6.2.9.1 Overview of Monitoring Results

During the reporting period and the mining of LW S3A, no impacts have been observed at this location. This location is located directly above LW S5A and was outside the active subsidence zone of LW S3A.

It is noted that as per approval letter from DPHI on 11 November 2024, the management of Bargo Cemetery will be incorporated into the existing LW S1A – S6A Wollondilly Shire Council Management Plan.

12.6.2.9.2 Wollondilly Shire Council TARP

During this reporting period, there have been no triggers under this TARP.

12.6.2.10 Wollondilly Anglican College

12.6.2.10.1 Overview of Monitoring Results

Ground surveys and visual inspections were conducted at Wollondilly Anglican College up to January 2025 in accordance with the Wollondilly Anglican College Management Plan following the completion of LW S3A. No impacts to buildings, structures, dams, fences or other built features were observed during the reporting period.

During the reporting period, no impacts to built features were observed at this property.

12.6.2.10.2 Wollondilly Anglican College TARP

During this reporting period, there have been no triggers under this TARP.

12.6.2.11 Tahmoor Mine Site

12.6.2.11.1 Overview of Monitoring Results

Inspection and monitoring were conducted at the Tahmoor Mine Site during LW S3A in accordance with the Tahmoor Mine Site Management Plan and additional monitoring commitments. The monitoring program included GNSS monitoring at the Gantry and Shaft Site (Site S16), tilt monitoring, conveyor and tunnel monitoring, and periodic surveys and inspections of mine infrastructure.

Following completion of LW S3A extraction in December 2024, monitoring continued during the residual subsidence period with conveyor and tunnel surveys completed in February 2025.

Monitoring results indicated that rates of ground movement reduced to low levels during the reporting period.

No mining-related impacts were observed at the Tahmoor Mine Site during the reporting period. The mine site remained safe and serviceable throughout 2025.

12.6.2.11.2 Tahmoor Mine Site TARP

During this reporting period, there have been no triggers under this TARP.

12.6.2.12 Australian Wildlife Sanctuary

12.6.2.12.1 Overview of Monitoring Results

Subsidence Status Reports were prepared for the Australian Wildlife Sanctuary during periods of active subsidence and summarised monitoring and inspection results from relevant GNSS units, the Tahmoor Mine Boundary Line (V-Line), Main Southern Railway monitoring, local road surveys, structures, built features and observations of natural features.

During active subsidence associated with LW S3A, minor impacts to fences, gates and gravel footpaths within the Australian Wildlife Sanctuary were observed and repaired as part of the management program. No ongoing impacts were identified following completion of these repairs. Monitoring ceased in October 2024 following completion of the active monitoring period and no impacts to built features were reported during the 2025 reporting period.

During the reporting period, no impacts to built features were observed at this property.

During the reporting period, changes were observed in Wirrimbirra Creek (a tributary of Teatree Hollow) with regards to water level and flow within the waterway (refer to **Appendix 9**). These changes are summarised below:

- Visually observed anomalous change in water level and overland flow at TT2 as compared with baseline conditions during the reporting period;
- The recorded water level for TT2 had declined below the baseline minimum level under conditions that are atypical relative to the historical record for more than a month during the reporting period. This atypical water level was considered likely to be due to mining-induced reduction in groundwater baseflow into the pool;
- Visual observation of moderate erosion was noted at Knickpoint site K64 during June, September and December 2025 due to rainfall events;
- Minor changes to previously observed fractures at TT2 with one (1) additional fracture identified in April 2025. An additional fracture identified at TT10 in April 2025 with minor changes observed to the previously identified fracture.

These changes in water level and physical features of the pools are noted to be related to observations discussed in **Section 12.8.1**.

No impacts were observed to the rock shelter located on the Australian Wildlife Sanctuary property (refer to **Section 12.5.1** for more details of this observation).

12.6.2.12.2 Australian Wildlife Sanctuary TARP – Impacts Observed Generally

During this reporting period, there have been no triggers under this TARP.

12.6.2.12.3 Wildlife Sanctuary TARP – Impacts on Natural Features

Background

The combination of observed increase in fracturing and pool water level reduction, as discussed in the above section (**Section 12.6.2.12.1**), resulted in a sustained Level 4 TARP trigger in accordance with the Australian Wildlife Sanctuary TARP for the reporting period.

Actions and Responses Completed

Table 12-5 outlines the actions and responses that are required to be completed in accordance with a Level 4 TARP trigger in the Australian Wildlife Sanctuary Management Plan, as well as how these actions and responses have been addressed.

Table 12-5 Actions and Responses for a Level 4 TARP Trigger (Australian Wildlife Sanctuary Management Plan TARP)

Action / Response from TARP	Tahmoor Coal response
Actions	
Tahmoor Coal to consider whether any additional management measures are required, including: - Investigation to assess if the observed change is related to mining effects, other catchment changes or the prevailing climate.	Detailed assessment of the observed water level changes and fracturing in Wirrimbirra Creek have been completed (refer to **Appendix 9**) and a summary is provided in **Section 12.8.1** of this report. Changes to water level were noted to be related to both mining-induced changes as well as prevailing weather conditions. Fracturing was confirmed to be directly related to mining.
Tahmoor Coal to consider whether any additional management measures are required, including: - Increase monitoring and reporting procedures.	As the cause of the changes have been confirmed to be associated with mining impact (as stated in the relevant TARPs in the Water Management Plan), increase in the frequency of monitoring and reporting is not deemed necessary.
Tahmoor Coal to consider whether any additional management measures are required, including: - If it is concluded that the impact is due to mining, implement a corrective management action plan (CMAP) in consultation with Australian Wildlife Sanctuary.	As required under the LW S1A-S6A Water Management Plan, Tahmoor Coal will develop a Waterways Corrective Action Management Plan (WCAMP) in consultation with AWS as required. The WCAMP is noted to be equivalent to a CMAP. The preparation of this WCAMP (if required) will likely commence following the cessation of subsidence movements associated with Tahmoor South mining.
Notify AWS of trigger exceedance and any management decisions undertaken.	AWS were notified of this trigger initially on 24 October 2023. A site inspection with the National Trust NSW and AWS staff to Pools TT2 and TT3 was conducted on 22 November 2023. There has been no change to TARP level since the initial trigger notification.

In addition, due to the reduction in water in the Wirrimbirra Creek, temporary water supply for wildlife was installed on 25 July 2023 and has continued to be maintained during the reporting period by Tahmoor Mine employees.

Proposed Actions

The current monitoring program will continue in accordance with the Australian Wildlife Sanctuary Management Plan.

12.6.2.13 Picton Weir

12.6.2.13.1 Overview of Monitoring Results

This built feature is located outside the active subsidence zone of LW S3A.

12.6.2.13.2 Picton Weir TARP

During this reporting period, there have been no triggers under this TARP.

12.6.2.14 Bargo Petroleum (3030 Remembrance Drive)

12.6.2.14.1 Overview of Monitoring Results

Subsidence Status Reports were prepared for Bargo Petroleum (3030 Remembrance Drive) during periods of active subsidence and summarised the results of ground surveys, visual inspections, fuel balance monitoring, pressure testing of fuel tanks and fuel lines, hydrocarbon testing, groundwater inspections and alignment surveys of vehicle hoists. Monitoring and inspections continued during the residual subsidence period, with the final surveys and inspections completed in January 2025. A fuel balance test completed on 17 January 2025 identified no apparent trends and no concerns were identified during monitoring.

No mining-related impacts to buildings, structures, fuel infrastructure or associated facilities were observed during the reporting period. The site remained safe and serviceable throughout the monitoring period.

During the reporting period, no impacts to built features were observed at this property.

12.6.2.14.2 3030 Remembrance Drive TARP

During this reporting period, there have been no TARP triggers under this TARP.

12.6.2.15 Inghams Farms

12.6.2.15.1 Overview of Monitoring Results

During the reporting period, there were no triggers under the Inghams Bargo Chicken Breeder Production Complex Management Plan and no impacts were observed at this property.

12.6.2.15.2 Inghams Farms TARPs

During this reporting period, there have been no TARP triggers under this TARP.

12.6.2.16 Tahmoor Garden Centre

12.6.2.16.1 Overview of Monitoring Results

Subsidence Status Reports were prepared for the Tahmoor Garden Centre during periods of active subsidence associated with LW S3A and summarised monitoring, inspection and survey results for Remembrance Drive, buildings and structures, and outdoor storage areas.

During LW S3A extraction, minor opening of an existing concrete expansion joint within the café area was observed on two occasions and was repaired by Tahmoor Coal using flexible sealant. No additional impacts were observed following completion of the repairs.

Monitoring ceased in December 2024, and no mining-related impacts were reported during the 2025 reporting period.

During the reporting period, no impacts to built features were observed at this property.

12.6.2.17 Tahmoor Garden Centre TARP

During this reporting period, there have been no TARP triggers under this TARP.

12.6.2.18 MKD Machinery

12.6.2.18.1 Overview of Monitoring Results

Subsidence Status Reports were prepared for the MKD Machinery property during periods of active subsidence associated with LW S3A and summarised monitoring and inspection results for Remembrance Drive, the Main Southern Railway corridor, buildings and structures, the silo hopper tower, concrete plant, external pavements, fences and gates, swimming pool and airstrip.

Monitoring ceased in October 2024 following completion of the active monitoring period. No mining-related impacts to buildings, structures or other built features were observed during the monitoring period and no impacts were reported during the 2025 reporting period.

During the reporting period, no impacts to built features were observed at this property.

12.6.2.18.2 MKD Machinery TARP

During this reporting period, there have been no triggers under this TARP.

12.6.2.19 Bargo Valley Produce

12.6.2.19.1 Overview of Monitoring Results

This property is located outside the active subsidence zones of LW S3A.

12.6.2.19.2 Bargo Valley Produce TARP

During this reporting period, there have been no triggers under this TARP.

12.6.2.20 Canine Country Club

12.6.2.20.1 Overview of Monitoring Results

This property is located outside the active subsidence zones of LW S3A.

12.6.2.20.2 Canine Country Club TARP

During this reporting period, there have been no triggers under this TARP.

12.7 Public Safety

The LW S1A-S6A Public Safety Management Plan was prepared to manage the potential consequences as a result of LW S1A-S6A extraction on public safety within the Study Area in accordance with Condition C8 of SSD 8445.

Management requirements for public safety are covered in the Built Features Management Plan and the Land Management Plan. Monitoring of cliffs, natural steep slopes and other landscape features has been conducted for the reporting period in accordance with the LW S1A-S6A Land Management Plan. In addition, monitoring of built features has been conducted for the reporting period in accordance with the LW S1A-S6A Built Features Management Plan.

No subsidence impacts were identified during the reporting period that were considered to pose a risk to public safety.

12.8 Surface Water Monitoring

12.8.1 Tahmoor South Domain

The LW S1A-S6A Water Management Plan was prepared to manage the potential environmental consequences of LW S1A-S6A extraction on surface water in accordance with Condition C8 of SSD 8445.

During this reporting period, the LW S1A-S6A Water Management Plan was implemented to monitor surface water:

- Flow, pool water level and surface water quality monitored for Teatree Hollow, Teatree Hollow tributary ('Wirrimbirra Creek'), Bargo River, and Bargo River Tributary – (refer to **Appendix 9**); and
- Creek monitoring for physical features and natural behaviour of pools, as well as channel stability, sedimentation and erosion – visual inspections and reporting by ENRS on a monthly basis (reports available on request, summarised in **Appendix 9**).

The following sections summarise the observations made during the reporting period for each surface water category. Performance against all Surface Water Management Plan TARPs for the reporting period are summarised in **Table 12-6 to Table 12-10** below, and actions and responses completed relating to any TARP triggers are discussed in the following sections.

12.8.1.1 Stream Water Quality

12.8.1.1.1 Overview of Monitoring Results

Surface water quality data has been recorded at the following sites (refer to **Figure 12-14**):

- Teatree Hollow:
  - Reference site: TT1-QLa;
  - Potential impact sites: TT2-QLa, TT3-QLa, TT7-QLa, TT9-QLa, TT12-QLa, TT13-QLa, TT14-QLa;
- Bargo River:
  - Reference site: BR16-QLa; and
  - Potential impact sites: BR12-QLa, BR13-QLa, BR17-QLa, BR18-QLa.

Water quality data consisted of constituents which are considered to be primary indicators of mining. These constituents include pH, electrical conductivity (EC), and specific dissolved metals (aluminium, copper, iron, manganese, nickel and zinc).

Charts illustrating water quality results for monitored pools in Teatree Hollow and Bargo River are presented in Appendix C of the Surface Water Monitoring Report (refer to **Appendix 9**).

During the reporting period, the following sites recorded elevated results of specific constituents:

Teatree Hollow catchment:

- Teatree Hollow Catchment sites were generally in accordance with their baseline levels over the reporting period for Field pH, EC, dissolved Aluminium, dissolved Copper, dissolved Iron, dissolved Manganese, dissolved Nickel and dissolved Zinc (except for the below triggers).
- Sites TT2-QLa, TT7-QLa, TT12-QLa, TT13-QLa and TT14-QLa triggered exceedances of their SSGV's (Site Specific Guideline Values) for the below:
  - Dissolved Aluminium, dissolved Nickel, pH and EC during the reporting period.

Bargo River Catchment:

- Bargo River Catchment sites were generally in accordance with their baseline levels over the reporting period for Field pH, EC, dissolved Aluminium, dissolved Copper, dissolved Iron, dissolved Manganese, dissolved Nickel and dissolved Zinc (except for the below triggers).
- Sites BR12-QLa and BR13-QLa recorded site-specific maximum concentrations of dissolved Aluminium during the reporting period.

12.8.1.1.2 TARP WMP1 – Stream Water Quality for all Watercourses within the Subsidence Area

During the reporting period, the following TARP trigger for Water Quality occurred as summarised below:

- TT2-QLa – Level 1 TARP trigger for pH in August 2025;
- TT7-QLa - Level 1 TARP trigger for dissolved Aluminium in March and September; Level 3 TARP trigger for EC in June 2025;
- TT12-QLa - Level 1 TARP trigger for pH in September 2025;
- TT13-QLa - Level 2 TARP trigger for pH in August 2025; and
- TT14-QLa - Level 2 TARP trigger for Dissolved Nickel in May; Level 3 TARP trigger for EC and pH in December 2025.

Further discussion of this trigger, including direct or indirect mining influence is provided in the Surface Water Report (refer to **Appendix 9**) for this reporting period.

Actions and Responses Completed

Table 12-6 outlines the actions and responses that are required to be completed in accordance with the Level 1, 2 and 3 TARP triggers for Surface Water Quality (TARP WMP1), as well as how these actions and responses have been addressed.

Table 12-6 Actions and Responses for Level 1, 2 and 3 TARP Triggers for Pool Water Quality (TARP WMP1)

Action / Responses from TARP WMP1	Tahmoor Coal response
Actions	
Level 1, 2 and 3 triggers Continue monitoring and review of data as per monitoring program.	Monitoring and review of data has been undertaken in accordance with the monitoring program.
Level 1, 2 and 3 triggers Assess if the trigger was exceeded during the baseline period prior to commencement of mining activities.	Exceedance of the trigger level during the baseline period was reviewed (refer to Section 5.4 of **Appendix 9**). With respect to pH exceedances at pools TT2, TT13 and TT14: • A Level 1 trigger for the lower bound pH SSGV was recorded at TT2-QLa during the baseline period. • A Level 1 trigger or above for pH was not recorded at TT13-QLa or TT14-QLa during the baseline period. With respect to EC exceedances at pool TT7 and TT14: • A Level 1 or higher trigger was not recorded at TT7-QLa or TT14-QLa during the baseline period.

Action / Responses from TARP WMP1	Tahmoor Coal response
Level 1, 2 and 3 triggers Review water quality trends along watercourse (upstream to downstream) to identify spatial changes with consideration to climatic conditions.	Water quality trends were reviewed for the watercourse reach (refer to Section 5.4 of **Appendix 9).**
Level 1, 2 and 3 triggers Discuss findings with and obtain other relevant information from key specialists (e.g. subsidence monitoring results, groundwater quality monitoring results) necessary to inform assessment.	Relevant information was obtained from key specialists necessary to inform assessment (refer to Section 3 and 5 of **Appendix 9**)
Level 1, 2 and 3 triggers Consider and decide on reasonable and feasible options for remediation as relevant (e.g. limestone cobbles for increasing pH level).	Reasonable and feasible options for remediation were considered (refer to Section 7.3 of **Appendix 9**). With respect to the water quality trigger exceedance recorded at TT2-QLa, TT7-QLa, TT12-QLa, TT13 QLa, and TT14-QLa during the review period, there are limited feasible corrective management actions (CMAs) that could be implemented prior to the cessation of subsidence movements associated with mining of LW S1A-S6A. Presently, there is negligible indication of a material impact on the water quality of downstream reaches of Teatree Hollow, given the limited surface flow reporting downstream since February 2023 and the consequently limited potential for transport of elevated pH, EC, dissolved aluminium and dissolved nickel. Therefore, no CMAs are considered reasonable or feasible at this stage.
Level 2 and 3 trigger Consider increasing monitoring and review of data frequency at sites where Level 2 has been reached or at other relevant sites, subject to land access, as follows: • Fortnightly, for sites within the active subsidence zone; and • Monthly, outside of the active subsidence period. Reasons for not increasing monitoring frequency could include confident identification of causation (e.g. singular, anthropogenic, non-mining related change or confirmed as a mining-related impact that resulted in a water quality change).	The monitoring frequency was not increased given that causation was identified and there is negligible indication of a material impact to the water quality of Teatree Hollow (as there has been negligible surface flow reporting to the downstream reach of Teatree Hollow since February 2023).
Level 2 and 3 trigger If increased monitoring is undertaken, conduct further analysis of water quality trends along creek (upstream to downstream) to identify spatial changes with consideration to climatic conditions.	
Level 2 and 3 trigger Review CMAs in light of findings from further investigations and consider additional remediation options.	

Action / Responses from TARP WMP1	Tahmoor Coal response
Level 2 and 3 trigger Review Water Management Plan and modify if necessary.	
Level 3 trigger If mining related impact unconfirmed, increase monitoring and review of data frequency at sites where Level 3 has been reached or at other relevant sites, subject to land access, as follows: • Fortnightly, for sites within the active subsidence zone. • Monthly, outside of the active subsidence period.	The monitoring frequency was not increased given that causation was identified.
Level 3 trigger Undertake a detailed investigation to assess if the change in behaviour is related to mining effects (e.g. whether there has been subsidence induced fracturing), other catchment changes, effects unrelated to mining or the prevailing climate.	
Responses	
Level 1, 2 and 3 triggers Report trigger exceedance to DPHI and key stakeholders	Trigger exceedances during the reporting period will be notified to DPHI and key stakeholders as part of the submission of this Annual Report.
Level 1, 2 and 3 triggers Report trigger exceedance and investigation outcomes in Annual Review	Completed as part of this report.
Level 1, 2 and 3 triggers Provide DPHI and key stakeholders with proposed corrective management actions (CMAs) for consultation (e.g. limestone cobbles for increasing pH level).	CMAs are not considered reasonable or feasible.
Level 1, 2 and 3 triggers Implement CMAs, subject to land access.	CMAs are not considered reasonable or feasible.
Level 1, 2 and 3 triggers Monitor and report on success of CMAs in Annual Review.	CMAs are not considered reasonable or feasible.
Level 2 and 3 trigger Advise DPE and key stakeholders of any required amendments to Water Management Plan	The Water Management Plan in force throughout the reporting period was WMP V6.0 (TAH-HSEC 00361 v6.0) approved by DPHI on 10/02/2025. No amendments were required during the reporting period.
Level 2 and 3 trigger Provide findings of CMA review to DPE and key stakeholders for consultation.	CMAs are not considered reasonable or feasible.
Level 2 and 3 trigger Implement additional CMAs, subject to land access.	CMAs are not considered reasonable or feasible.
Level 3 trigger If it is concluded from the detailed investigation that watercourses have been damaged by subsidence impacts: • Offer site visit with DPE and other key stakeholders.	A letter will be sent to DPHI and key stakeholders offering a site visit to impacted sites. Development and implementation of a WCAMP will be considered following cessation of active subsidence on the watercourse.

Action / Responses from TARP WMP1	Tahmoor Coal response
• Develop Watercourse Corrective Action Management Plan (WCAMP) in consultation with the Resources Regulator, DPE and other key stakeholders (in accordance with C12 of SSD 8445). The stream remediation measures in the WCAMP could	

Proposed Actions and Responses

From the review of actions and responses (as discussed in **Table 12-6**), the following remain outstanding:

- Preparation of a WCAMP (if required) to address damage to watercourses will be prepared and implemented following the cessation of subsidence movements associated with Tahmoor South mining.

The current monitoring program will continue in accordance with the LW S1A-S6A Water Management Plan. The next update will be provided as part of the next reporting requirement.

12.8.1.1.3 TARP WMP2 – Stream Water Quality for other Watercourses (Bargo River and Hornes Creek)

During this reporting period, there have been no triggers under this TARP.

12.8.1.2 Pool Water Level

12.8.1.2.1 Overview of Monitoring Results

Surface water level data has been recorded at the pool monitoring sites on Teatree Hollow, Teatree Hollow Tributary (also known as Wirrimbirra Creek), Bargo River, and Bargo River Tributary as shown in **Figure 12-14**. Continuous surface water level data and manual monthly water level measurements have been recorded at seven (7) monitoring sites on Teatree Hollow (and tributary) and six (6) monitoring sites on Bargo River (and tributary).

Streamflow recorded from flow monitoring site TT-F1 in Teatree Hollow indicate that streamflow is intermittent, with extended periods of no flow recorded prior to the commencement of mining of LW S1A. During the review period, flow occurred intermittently in response to rainfall. The streamflow recession rate recorded during the review period was similar to that of historical rates, including during periods prior to the commencement of mining of LW S1A.

From January to August 2025, generally above average rainfall conditions were recorded for the area. Below average rainfall was recorded from September to early December 2025 (ATC Williams, 2026a).

During the reporting period, the following monitoring sites on Teatree Hollow and Bargo River (and their tributaries) observed a reduction below baseline minimum levels:

- Monitoring site TT2 – pool was dry or below the sensor level for majority of the monitoring period. The water level was recorded above the baseline minimum for brief periods in January, May, July and September (during and following rainfall events).
- Monitoring site TT3 – pool was dry or below the sensor level for majority of the review period. The water level was recorded above the CTF level for brief periods in January, February, April, June and September (during and following rainfall events).
- Monitoring site TT7 – The water level remained above the baseline minimum for majority of the review period, with brief declines below the baseline minimum in January and December.

- Monitoring site TT9 – the water level remained above the baseline minimum for majority of the review period, with periods below the baseline minimum occurring in March, April, and from October to December.
- Monitoring site TT12 – pool was dry or below the sensor level for majority of the review period. The water level was recorded above the baseline minimum for brief periods following rainfall events.
- Monitoring site TT13 – the water level was below the baseline minimum for majority of the review period, except for brief periods in January, February and between May to September.
- Monitoring site BR17 - the water level remained at or above the baseline minimum for majority of the review period. Between February and May 2025, water levels were slightly below the baseline minimum but remained above the trigger level.
- Monitoring site BR18 - the water level remained at or above the baseline minimum for majority of the review period. During November and December 2025, water levels periodically declined below the baseline minimum but remained above the trigger level.

Charts illustrating monitored pool water level hydrographs for pools on Teatree Hollow and Bargo River (and their tributaries) are presented in the Surface Water Monitoring Report (refer to **Appendix 9** for more information).

12.8.1.2.2 TARP WMP3 - Pool Water Level for all Watercourses within the Subsidence Area

Background

During the reporting period, a number of TARP triggers for pool water level occurred as summarised below:

- Monitoring site TT2:
  - Level 2 TARP triggered during 8 December 2024 to 10 January 2025, 13, 15 and 20 to 27 January, 28 January to 14 February, 2 to 21 May, 8 June to 1 July, 15 to 30 July, 1 August, 6 to 10 September 2025;
  - Level 3 TARP triggered during 8 December 2024 to 10 January 2025, 16 February to 29 April, 20 September to 31 December 2025;
- Monitoring site TT3:
  - Level 2 TARP triggered during 14 and 22 to 27 January, 30 January to 14 February, 4 to 22 May, 10 June to 1 July, 18 July to 2 August, 7 to 10 September 2025;
  - Level 3 TARP triggered during 9 December 2024 to 11 January 2025, 17 February to 29 April, 25 September to 31 December 2025;
- Monitoring site TT7:
  - Level 2 TARP triggered during 27 December 2024 to 6 January 2025, 5 to 11 December, 24 to 31 December 2025;
- Monitoring site TT9:
  - Level 2 TARP triggered during 18 December 2024 to 6 January 2025, 7 to 10 February, 24 February to 11 March, 16 to 21 March, 25 to 28 March, 11 to 22 April, 29 November to 11 December, 20 to 31 December 2025;
  - Level 3 TARP triggered during 14 October to 22 November 2025;
- Monitoring site TT12:
  - Level 2 TARP triggered during 12 to 13 January, 15 and 23 to 27 January, 29 January to 14 February, 1 to 29 April, 3 to 21 May, 16 June to 1 July, 29 to 30 July, 27 to 28 September 2025;

- Level 3 TARP triggered during 9 December 2024 to 10 January 2025, 16 February to 28 March, 30 September to 31 December 2025;

- Monitoring site TT13:
  - Level 2 TARP triggered during 13 December 2024 to 11 January 2025, 1 to 14 February, 13 to 22 May, 25 June to 1 July, 27 July to 2 August 2025; and
  - Level 3 TARP triggered during 23 February to 29 April, 6 October to 31 December 2025.

Further discussion of these triggers, including confirmation of direct and indirect mining impacts, is provided in the Surface Water Report (refer **Appendix 9**) for this reporting period. In summary, it is considered that the water level decline recorded at these monitoring sites during the review period is related to direct and indirect mining effects in combination with prevailing climatic conditions.

Actions and Responses Completed

Table 12-7 outlines the actions and responses that are required to be completed in accordance with Level 1, 2 and 3 TARP triggers for pool water level (TARP WMP3), as well as how these actions and responses have been addressed.

Table 12-7 Actions and Responses for Level 1, 2 and 3 TARP Triggers for Pool Water Level Reduction (TARP WMP3)

Action / Responses from TARP WMP3	Tahmoor Coal Response
Actions	
Level 1, 2 and 3 triggers Continue monitoring and review of data as per monitoring program.	Monitoring and review of data is undertaken in accordance with the monitoring program.
Level 1, 2 and 3 triggers Review water level trends along watercourse (upstream to downstream) to identify spatial changes with consideration to climatic conditions.	Water level trends for all sites in Teatree Hollow and Teatree Hollow tributary were reviewed with consideration to climatic conditions (refer to Section 6.1 of **Appendix 9**).
Level 1, 2 and 3 triggers Review streamflow data recorded at TT-F1 and conduct streamflow reduction assessment.	Streamflow data recorded at TT-F1 were reviewed, including qualitative comparison of recorded flow responses and recession behaviour with rainfall and historical observations. However, uncertainty in the completeness and accuracy of the LOP4 overflow and LDP16 discharge records prevented reliable adjustment of the TT-F1 record and quantitative assessment of streamflow reduction and associated water take for the review period. Refer to Section 5.3 and Section 6.2 of **Appendix 9**. Improvements to overflow and discharge monitoring and recording have been recommended to support future assessments.
Level 1, 2 and 3 triggers Discuss findings and obtain other relevant information from key specialists (e.g. subsidence monitoring results, groundwater level monitoring results) necessary to inform assessment.	Relevant information was obtained from key specialists necessary to inform assessment (refer to **Appendix 9**).
Level 2 and 3 triggers Consider increasing monitoring and review of data frequency at sites where Level 2 has been reached or	Causation was identified for the Level 2 and 3 triggers (refer to Section 6.1 of **Appendix 9**).

Action / Responses from TARP WMP3	Tahmoor Coal Response
at other relevant sites, subject to land access, as follows: • Fortnightly, for sites within the active subsidence zone. • Monthly, out of the active subsidence period. Reasons for not increasing monitoring frequency could include confident identification of causation (e.g. singular, anthropogenic, non-mining related change or confirmed as a mining-related impact that resulted in a water level change).	
Level 2 and 3 triggers If increased monitoring is undertaken, conduct further analysis of water level trends along creek (upstream to downstream) to identify spatial changes with consideration to climatic conditions.	Water level trends for all sites in Teatree Hollow and Teatree Hollow tributary were reviewed with consideration to climatic conditions (refer to Section 6.1 of **Appendix 9**).
Level 2 and 3 triggers Review Water Management Plan and modify if necessary.	The Water Management Plan in force throughout the reporting period was WMP V6.0 (TAH-HSEC 00361 v6.0) approved by DPHI on 10/02/2025. No amendments were required during the reporting period.
Level 3 trigger If mining related impact unconfirmed, increase monitoring and review of data frequency at sites where Level 3 has been reached or at other relevant sites, subject to land access, as follows: • Fortnightly, for sites within the active subsidence zone. • Monthly, outside of the active subsidence period.	Causation was identified for the Level 3 triggers (related to subsidence induced fracturing and the prevailing climate, refer to Section 6.1 of **Appendix 9**). As such, the monitoring frequency was not increased.
Level 3 trigger Undertake a detailed investigation to assess if the change in behaviour is related to mining effects (e.g. whether there has been subsidence induced fracturing), other catchment changes, effect unrelated to mining or the prevailing climate.	A detailed investigation was undertaken to assess if the change in behaviour at is related to mining effects (refer to Section 6 of **Appendix 9**). Direct and indirect impacts from mining have been confirmed at the pools in question, as summarised in **Table 12-8**.
Responses	
Level 1, 2 and 3 triggers Report trigger exceedance to DPHI and key stakeholders	Trigger exceedances during the reporting period will be notified to DPHI and key stakeholders as part of the submission of this Annual Report.
Level 1, 2 and 3 triggers Report trigger exceedance and investigation outcomes in Annual Review	Completed as part of this report.
Level 2 and 3 triggers Advise DPHI and key stakeholders of any required amendments to Water Management Plan	The Water Management Plan in force throughout the reporting period was WMP V6.0 (TAH-HSEC 00361 v6.0) approved by DPHI on 10/02/2025. No amendments were required during the reporting period.
Level 3 trigger If it is concluded from the detailed investigation that watercourses have been damaged by subsidence impacts:	A site visit was offered to DPIE and NRAR in relation to Level 3 TARP triggers of TARPs WMP3 and WMP5. This offer was extended via letter dated 10 November 2023.

Action / Responses from TARP WMP3	Tahmoor Coal Response
• Offer site visit with DPHI and other key stakeholders. • Develop Watercourse Corrective Action Management Plan (WCAMP) in consultation with the Resources Regulator, DPHI and other key stakeholders (in accordance with C12 of SSD 8445). The stream remediation measures in the WCAMP could include grout curtain and grout pattern injection. • Implement approved WCAMP, subject to land access.	A site visit was also offered to the National Trust NSW and Australian Wildlife Sanctuary and took place on 22 November 2023. No new Level 3 TARP triggers have been activated during the reporting period. In accordance with C12 of SSD 8445 and as detailed in the WMP, a Watercourse Corrective Action Management Plan (WCAMP) will be prepared (if required) for watercourses damaged by subsidence impacts in consultation with relevant government agencies, as defined in the WMP. The WCAMP will be prepared and implemented (if required) at the cessation of subsidence movements associated with Tahmoor South mining.

Proposed Actions and Responses

From the review of actions and responses (as discussed in **Table 12-7**), the following remain outstanding:

- Preparation of a WCAMP (if required) to address damage to watercourses will be prepared and implemented following the cessation of subsidence movements associated with Tahmoor South mining.

The current monitoring program will continue in accordance with the LW S1A-S6A Water Management Plan. The next update will be provided as part of the next reporting requirement.

12.8.1.2.3 TARP WMP4 – Pool Water Level for other Watercourses (Bargo River and Hornes Creek)

During this reporting period, there have been no triggers under this TARP.

12.8.1.3 Physical Features and Natural Behaviour

12.8.1.3.1 Overview of Monitoring Results

Visual and photographic surveys for subsidence impacts on creeks have been completed monthly for monitoring pools and reaches in Teatree Hollow and Teatree Hollow tributary within the post mining subsidence zone of LW S3A. However, the monthly inspection for February 2025 was not conducted due to financial constraints experienced with the business.

The purpose of these surveys is to note whether change has occurred to pool level, drainage or overland flow, and to assist in determining if any change can be attributed to mining impacts. Surveys are carried out to identify rock bar and/or stream base cracking, changes in overland connected flow, gas release, turbidity or increased iron precipitation. Creek monitoring locations for physical features and natural behaviour are illustrated on **Figure 12-15**.

During this reporting period, there were numerous observed occurrences of impacts to pool water level, overland connected flow and observations of iron staining, turbidity and fracturing. These observations are summarised below:

- **Pool TT1 (reference site):**
    - Pool water level was visually consistent with baseline conditions at the January, March through to November inspections;
    - Pool water level was visually lower than baseline conditions in December;
    - Flow over hydraulic control noted in the January, March to October inspections;

- No flow over hydraulic control in the November and December inspections; and
- Moderate turbidity was noted in the January, March through to December inspections.

- **Pool TT2:**
  - Pool water level was visually consistent with baseline conditions in the August and September inspections;
  - Pool water level was visually higher than baseline condition in May inspection;
  - Pool water level was visually lower than baseline conditions in January, June and July inspections;
  - Flow over hydraulic control noted in May, August and September;
  - No flow over hydraulic control noted in January, June and July.
  - Pool was observed as dry in the March, April, October to December inspections;
  - New Fracture (fracture 8) noted April; and
  - High turbidity noted in the January, May to September inspections.
- **Pool TT3:**
  - Pool water level visually consistent with baseline conditions in August and September;
  - Pool water level was visually higher than baseline condition in May;
  - Water was noted as pooled in the January inspection;
  - Pool was observed as dry in the March, April, June, July and October to December inspections;
  - Flow over hydraulic control noted in May, August and September;
  - No flow over hydraulic control in January; and
  - High turbidity was noted during the May to September inspections.
- **Pool TT7:**
  - Pool water level visually consistent with baseline conditions in June to September and November inspections;
  - Pool water level was visually higher than baseline condition during May and October;
  - Pool water level was visually lower than baseline conditions in March and December;
  - Flow was present over the hydraulic control in May and August through to November Inspections;
  - No flow over hydraulic control in June, July and December;
  - Iron staining at the upstream reach of the pool was noted throughout the reporting period (consistent with baseline inspection); and
  - High turbidity was observed in March and May through to November; Moderate turbidity was observed in December.
- **Pool TT9:**
  - Pool water level visually consistent with baseline conditions in August and September;
  - Pool water level was visually higher than baseline condition during May;
  - Water level was visually lower than baseline conditions in March, June, July, October and December;
  - Pool was observed as dry in November;
  - Flow was present over the hydraulic control in the May through to September inspections;

- No flow over the hydraulic control observed during March, October and December; and
- Moderate turbidity was observed in March (consistent with baseline inspection), High turbidity during May through to October and December inspections.

- **Pool TT10**:
  - Pool water level visually consistent with baseline conditions in the June to September inspections;
  - Pool water level was visually higher than baseline condition during January and May;
  - Pool water level was visually lower than baseline conditions in March, April and October;
  - Pool was observed as dry during the November and December inspections;
  - Flow was present over the hydraulic control in the January and May through to September inspections;
  - No flow over the hydraulic control observed during the March, April and October inspections;
  - One (1) fracture was observed (Fracture 2) upstream of TT10 during April; and
  - Moderate turbidity was observed during January and March through to September inspections. High turbidity observed during the October inspection.
- **Pool TT11:**
  - Pool water level visually consistent with baseline conditions in August;
  - Pool water level was visually higher than baseline condition during May and September;
  - Water was observed as pooled in the January inspection;
  - Pool was observed as dry in March, April, June, July, October through to December inspections; and
  - Flow was present over the hydraulic control in May, September and August.
- **Pool TT12:**
  - Pool water level visually consistent with baseline conditions in August and Sept;
  - Pool water level was visually higher than baseline condition during May;
  - Pool was observed as dry during the January, March, April, June, July and October through to December inspections;
  - Flow was present over the hydraulic control in May, August and September; and
  - Iron staining 50m downstream of TT12, relatively unchanged since March 2023.
- **Pool TT13:**
  - Pool water level visually consistent with baseline conditions in August and September;
  - Pool water level was visually higher than baseline condition during May;
  - Water level was visually lower than baseline conditions in June, July and Oct;
  - Water was observed as pooled in the June and July inspections;
  - Flow was present over the hydraulic control in May, August and September;
  - No flow over hydraulic control in October;
  - Pool was observed as dry during the November and December inspections;
  - High turbidity was observed during the June through to September inspections.
- **Pool TT15:**

- Pool water level was generally consistent with baseline conditions in January and March;
- Pool water level was visually higher than baseline condition during the May and September inspections;
- Pool water level was visually lower than baseline conditions in the March, April, June through to August inspections;
- Flow was present over the hydraulic control in the January, March through to September inspections;
- Pool was observed as dry in the October through to December inspections; and
- Moderate turbidity was noted during the January and March through to September inspections.

Figure 12-16 presents the location of surface water flow, intermittent water flow and fracturing observed at the end of the reporting period (December 2025).

A summary of mining related impacts to pools and stream reaches from mining of LW S1A – LW S3A is provided in **Table 12-8** below. It is noted that the mining related impacts to the watercourse features listed in the **Table 12-8** are consistent with that predicted in the Tahmoor South Project Environmental Impact Statement, and no greater impact than that predicted in the EIS has occurred to watercourses within the Subsidence Area.

Table 12-8 Summary of mining related impacts to watercourse features (source: ATC Williams, 2026; Appendix 9)

Watercourse Feature	Impact Feature	Impact Type
Pool TT2	• Pool water level • Physical (fractures) • Water Quality	Direct mining impact
Pool TT3	• Pool water level	Indirect mining impact
Pool TT7	• Pool water level • Water Quality	Indirect mining impact
Pool TT9	• Pool water level • Physical (fractures)	Direct mining impact
Pool TT10	• Pool water level • Physical (fractures)	Indirect mining impact
Pool TT11	• Pool water level	Indirect mining impact
Pool TT12	• Pool water level • Physical (fractures) • Iron staining • Water Quality	Direct mining impact
Pool TT13	• Pool water level	Indirect mining impact
Pool TT14	• Water Quality	Indirect mining impact
Pool TT15	• Pool water level • Physical (fractures)	Indirect mining impact
Knickpoint K64	• Physical (erosion)	Direct mining impact

Direct and indirect mining impacts, in the form of surface fracturing and associated flow diversion, have occurred at several locations in Teatree Hollow and Teatree Hollow tributary, upstream of

monitoring site TT-F1. During the review period, the reduction in surface flow recorded at TT-F1 was generally consistent with natural (climatic) variability and historical observations. As such, there is no indication of material environmental harm to Teatree Hollow or other watercourses caused by mining activities (**Appendix 9**).

No mining-related impact was identified from the available monitoring data for the monitored reach of the Bargo River (outside the Study Area). Surface water monitoring and data review will continue in accordance with the WMP.

In accordance with C12 of SSD 8445 and as detailed in the WMP, a Watercourse Corrective Action Management Plan (WCAMP) will be prepared for watercourses damaged by subsidence impacts. The WCAMP will be prepared in consultation with relevant government agencies, as defined in the WMP. The WCAMP will be prepared and implemented (if required) at the cessation of subsidence movements associated with Tahmoor South mining.

Impacts observed at K64 are considered to be associated with high rainfall and flow events acting in combination with mining-induced subsidence (i.e. a direct mining impact has been confirmed). In accordance with the WMP, an increase in monitoring frequency is not required. Tahmoor Coal will continue visual inspections of K64 in accordance with the monitoring program to assess the extent and longevity of the observed impacts, with the need for remediation measures to be assessed at a later stage if required.

12.8.1.3.2 TARP WMP5 – Physical Features and Natural Behaviour of Watercourses within the Subsidence Area

Background

During the reporting period, several TARP triggers for physical features and natural behaviour of watercourses occurred as summarised below:

- **Pool TT2**: Level 3 triggered in January, March through to December 2025;
- **Pool TT3**: Level 3 triggered in January, March through to December 2025;
- **Pool TT7:** Level 1 triggered in December; Level 3 triggered for January and March 2025;
- **Pool TT9:** Level 3 triggered in March, May through to December 2025;
- **Pool TT10**: Level 1 triggered in October, Level 2 triggered in November and December; Level 3 triggered for January, March through to September 2025;
- **Pool TT11:** Level 3 triggered in January, March through to December 2025;
- **Pool TT12:** Level 3 triggered in January, March through to December 2025;
- **Pool TT13**: Level 1 triggered in June and October, Level 2 triggered in July and November, Level 3 triggered in December 2025;
- **Pool TT15:** Level 1 triggered in October and November, Level 2 triggered in January and December, Level 3 triggered in March, May through to September 2025.

Further discussion of these triggers, including confirmation of direct and indirect mining impacts, is provided in the 2025 Annual Surface Water Report (refer to **Appendix 9**) for this reporting period.

Actions and Responses Completed

Table 12-9 outlines the actions and responses that are required to be completed in accordance with Level 1, 2 and 3 TARP triggers for physical features and natural behaviour (TARP WMP5), as well as how these actions and responses have been addressed.

Table 12-9 Actions and Responses for Level 1, 2 and 3 TARP Triggers for Physical Features and Natural Behaviour of Watercourses (TARP WMP5)

Action / Responses from TARP WMP5	Tahmoor Coal response
Actions	
Level 1, 2 and 3 trigger Continue monitoring and review of data as per monitoring program.	Monthly monitoring and review of data is ongoing according to the monitoring program.
Level 1, 2 and 3 trigger Assess visual change along watercourse (upstream to downstream) to observe any spatial changes with consideration to climatic conditions.	Visual changes along watercourse were reviewed with consideration to climatic conditions (refer to Section 6.3 of **Appendix 9**).
Level 1, 2 and 3 trigger Discuss findings and obtain other relevant information from key specialists (e.g. subsidence monitoring results, surface water monitoring results, groundwater monitoring results) necessary to inform assessment.	Relevant information was obtained from key specialists necessary to inform assessment (refer to **Appendix 9**).
Level 2 and 3 trigger Consider increasing monitoring and review of data frequency to fortnightly at sites where Level 1 has been reached and at other relevant sites, subject to land access, as follows: • Fortnightly, for sites within the active subsidence zone. • Monthly, outside of the active subsidence period. Reasons for not increasing monitoring frequency could include confident identification of causation (e.g., surface fracturing of weathered bedrock that does not affect water holding capacity of rockbar control or pool base or confirmed as a mining-related impact)	Monitoring and review of data frequency was not increased as mining impacts were confirmed.
Level 2 and 3 trigger Undertake a detailed investigation to assess if the change in behaviour is related to mining effects (e.g. whether there has been subsidence induced fracturing other catchment changes, effect unrelated to mining or the prevailing climate).	A detailed investigation was undertaken to assess if the change in behaviour is related to mining effects (refer to Section 6 of **Appendix 9**). Direct and indirect impacts from mining have been confirmed at the pools in question, as summarised in **Table 12-8**.
Level 2 and 3 trigger Review Water management Plan and modify if necessary.	The Water Management Plan in force throughout the reporting period was WMP V6.0 (TAH-HSEC 00361 v6.0) approved by DPHI on 10/02/2025. No amendments were required during the reporting period.
Level 2 and 3 trigger If mining related impact unconfirmed, increase monitoring and review of data frequency at sites where Level 2 has been reached or at other relevant sites, subject to land access, as follows: • Fortnightly, for sites within the active subsidence zone. • Monthly, outside of the active subsidence period.	Monitoring and review of data frequency was not increased as mining impacts were confirmed.
Responses	
Level 1, 2 and 3 trigger Report trigger exceedance to DPHI and key stakeholders	Notification of exceedances as identified in this report will be reported in the AEMR which is sent to DPHI and relevant stakeholders.

Action / Responses from TARP WMP5	Tahmoor Coal response
Level 1, 2 and 3 trigger Report trigger exceedance and investigation outcomes in Six Monthly Subsidence Impact Report and Annual Review	Completed as part of this report.
Level 2 and 3 trigger Advise DPHI and key stakeholders of any required amendments to Water Management Plan	The Water Management Plan in force throughout the reporting period was WMP V6.0 (TAH-HSEC 00361 v6.0) approved by DPHI on 10/02/2025. No amendments were required during the reporting period.
Level 3 trigger Offer site visit with DPHI and other key stakeholders.	A letter will be sent to DPHI and key stakeholders offering a site visit to impacted sites. Development and implementation of a WCAMP will be considered following cessation of active subsidence on the watercourse.
Level 3 trigger Develop Watercourse Corrective Action Management Plan (WCAMP) in consultation with the Resources Regulator, DPHI and other key stakeholders (in accordance with C12 of SSD 8445). The stream remediation measures in the WCAMP could include grout curtain and grout pattern injection.	In accordance with C12 of SSD 8445 and as detailed in the WMP, a Watercourse Corrective Action Management Plan (WCAMP) will be prepared for watercourses damaged by subsidence impacts. The WCAMP will be prepared in consultation with relevant government agencies, as defined in the WMP. The WCAMP will be prepared and implemented (if required) at the cessation of subsidence movements associated with Tahmoor South mining.
Level 3 trigger Implement approved WCAMP, subject to land access.	Refer to response above.

Proposed Actions and Responses

From the review of actions and responses (as discussed in **Table 12-9**), the following actions and responses remain outstanding:

- Preparation of a WCAMP (if required) to address damage to watercourses will be prepared and implemented following the cessation of subsidence movements associated with Tahmoor South mining.

The current monitoring program will continue in accordance with the LW S1A-S6A Water Management Plan. The next update will be provided as part of the next reporting requirement.

12.8.1.3.3 TARP WMP6 – Physical Features and Natural Behaviour of Pools for Other Watercourses (Bargo River and Hornes Creek)

During this reporting period, there have been no triggers under this TARP.

12.8.1.4 Channel Stability, Sedimentation and Erosion

12.8.1.4.1 Overview of Monitoring Results

Visual and photographic surveys for subsidence impacts on creeks have been completed monthly for morphology and channel stability monitoring sites in Teatree Hollow and Teatree Hollow tributary within the active subsidence zone of LW S1A to LW S3A, except for headwater sites which are completed on an annual basis.

The purpose of these surveys is to note whether change has occurred to channel stability, erosion and sedimentation, and to assist in determining if any change can be attributed to mining impacts. Surveys are carried out to identify any visual changes in knickpoint development and channel

morphology. In addition, annual visual inspections are conducted at headwater sites to characterise erosion and sedimentation.

No mining activities have been undertaken during the reporting period with LW S3A completed on 17 December 2024.

Creek monitoring locations for channel stability, sedimentation and erosion are illustrated on **Figure 12-17.**

During September 2025, the Annual Headwaters Inspection was completed to satisfy the monitoring requirements of the LW S1A-S6A Extraction Plan Water Management Plan. Ten (10) sites were inspected and results compared against baseline inspections from September 2022. Normal conditions were reported for all ten (10) headwater sites and no TARP triggers during the inspection with no further visible increase of erosion or sedimentation of the headwater stream.

Visual inspection observations for Channel geomorphology and knickpoint sites recorded during the reporting period have been compared to the baseline visual inspection records from October 2022.

At knickpoint site K64, moderate erosion development was observed in June, September and December 2025 in comparison to baseline conditions. High rainfall / flow events occurred when first observed in June 2024, in addition to direct impacts from undermining of knickpoint site K64. Changes at this site are considered to be associated with high rainfall / flow events in combination with mining-induced subsidence (refer to **Appendix 9**).

12.8.1.4.2 TARP WMP7 – Channel Stability, Sedimentation and Erosion

Background

During the reporting period, one (1) channel stability, sedimentation and erosion TARP trigger was sustained, as summarised below:

- Knickpoint Site K64: Level 2 TARP triggered in June, September and December 2025.

Further discussion of these triggers, including confirmation of direct and indirect mining impacts, is provided in the 2025 Annual Surface Water Report (refer to **Appendix 9**) for this reporting period.

Actions and Responses Completed

Table 12-10 outlines the actions and responses that are required to be completed in accordance with Level 1 and 2 TARP triggers for channel stability, sedimentation and erosion (TARP WMP7), as well as how these actions and responses have been addressed.

Table 12-10 Actions and Responses for Level 1 and 2 TARP Triggers for Channel Stability, Sedimentation and Erosion (TARP WMP7)

Action / Responses from TARP WMP7	Tahmoor Coal Response
Actions	
Level 1 and 2 trigger Continue monitoring and review of data as per monitoring program.	Monitoring and review of data is ongoing according to the monitoring program.
Level 1 and 2 trigger Discuss findings and obtain other relevant information from key specialists (e.g. subsidence monitoring results, biodiversity monitoring results) necessary to inform assessment.	Relevant information was obtained from key specialists necessary to inform assessment (refer to **Appendix 9**).

Action / Responses from TARP WMP7	Tahmoor Coal Response
Level 1 and 2 trigger Consider increasing monitoring and review of data frequency at sites where Level 1 has been reached or at other relevant sites, subject to land access, as follows: • Fortnightly, for sites within the active subsidence zone. • Monthly, outside of the active subsidence period. Reasons for not increasing monitoring frequency could include confident identification of causation (e.g. singular, anthropogenic, non-mining related change or confirmed as a mining-related impact that resulted in increased erosion).	Frequency of monitoring and data review has not been increased as the causation of the erosion at the knickpoint site K64 is considered to be understood.
Level 1 and 2 trigger Consider and decide on reasonable and feasible options for remediation as relevant (e.g. enhanced vegetation establishment, rock armouring).	CMAs are not considered reasonable or feasible until the extent and longevity of the impacts are confirmed. Monitoring will continue to assess if remediation actions are required.
Level 2 trigger If mining related impact unconfirmed, increase monitoring and review of data frequency at sites where Level 2 has been reached or at other relevant sites, subject to land access, as follows: • Fortnightly, for sites within the active subsidence zone. • Monthly, outside of the active subsidence period.	Frequency of monitoring and data review has not been increased as the causation of the erosion at the knickpoint site K64 is understood to be partially due to mining. Monitoring as per the monitoring program and after large rainfall events will continue at K64 to assess if remediation actions are required.
Level 2 trigger Undertake a detailed investigation to assess if the change in behaviour is related to mining effects (e.g. subsidence induced, other catchment changes, effects unrelated to mining or the prevailing climate).	Direct impacts from mining were confirmed for K64 in 2024 (ATCW (2025)).
Level 2 trigger Obtain specialist advice on further CMAs.	Advice was obtained by key specialists, as detailed in Section 6.3 and Section 8 of **Appendix 9**.
Level 2 trigger Review CMAs in light of findings from further investigations and consider additional remediation options.	CMAs are not considered reasonable or feasible until the extent and longevity of the impacts are confirmed. Monitoring will continue at K64 to assess if remediation actions are required.
Level 2 trigger Review Water Management Plan and modify if necessary.	There are no proposed changes to the Water Management Plan in light of the Level 2 TARP trigger at K64.
Responses	
Level 1 and 2 trigger Report trigger exceedance to DPHI and key stakeholders	Completed as part of this report.
Level 1 and 2 trigger Report trigger exceedance and investigation outcomes in Six Monthly Subsidence Impact Report and Annual Review.	Completed as part of this report.

Action / Responses from TARP WMP7	Tahmoor Coal Response
Level 1 and 2 trigger Provide DPHI and key stakeholders with proposed corrective management actions (CMAs) for approval (e.g. enhanced vegetation establishment, rock armouring).	CMAs are not considered reasonable or feasible until the extent and longevity of the impacts are confirmed. Monitoring will continue at K64 to assess if remediation actions are required.
Level 1 and 2 trigger Implement CMAs, subject to land access.	
Level 1 and 2 trigger Monitor and report on success of CMAs in Six Monthly Subsidence Impact Report and Annual Review.	
Level 2 trigger Advise DPHI and key stakeholders of any required amendments to Water Management Plan.	There are no proposed changes to the Water Management Plan in light of the Level 2 TARP trigger at K64.
Level 2 trigger If it is concluded from the detailed investigation that watercourses have been damaged by subsidence impacts: • Offer site visit with DPHI and other key stakeholders.	A site visit was offered to DPIE and NRAR in relation to Level 2 TARP trigger of TARP WMP7 for site K64. This offer was extended via letter dated 4 October 2024.
Level 2 trigger If it is concluded from the detailed investigation that watercourses have been damaged by subsidence impacts: • Provide findings of CMA review to DPHI and key stakeholders for consultation.	CMAs are not considered reasonable or feasible until the extent and longevity of the impacts are confirmed. Monitoring will continue at K64 to assess if remediation actions are required.
Level 2 trigger If it is concluded from the detailed investigation that watercourses have been damaged by subsidence impacts: • Implement additional CMAs, subject to land access.	CMAs are not considered reasonable or feasible until the extent and longevity of the impacts are confirmed. Monitoring will continue at K64 to assess if remediation actions are required.

Proposed Actions and Responses

The current monitoring program will continue in accordance with the LW S1A-S6A Water Management Plan. The next update will be provided as part of the next reporting requirement.

12.8.1.5 Recommendations and Actions for Surface Water

12.8.1.5.1 Current Surface Water Monitoring Recommendations

Based on the assessment outcomes discussed in the 2025 Annual Surface Water Review (**Appendix 9**), ATC Williams recommended that ongoing review of surface monitoring data is continued to be undertaken in accordance with the LW S1A-S6A Water Management Plan. No changes to the current monitoring program are proposed at this time.

However, the monitoring and recording arrangements for LOP4 and LDP16 should be reviewed and improved to provide more complete and reliable flow-volume records for future adjustment of the TT-F1 streamflow data. Recommended measures include calibration and verification of the relevant water-level sensors and installation of an appropriate flow-measurement device at LDP16.

With respect to the water quality trigger exceedances recorded at TT2-QLa, TT7-QLa, TT12-QLa, TT13 QLa, and TT14-QLa during the review period, there are limited feasible corrective management actions (CMAs) that could be implemented prior to the cessation of subsidence movements associated with mining of LW S1A-S6A. As stated in the EIS, liberation of contaminants can occur from subsidence induced fracturing in watercourses, causing localised and transient increases in certain constituents. Presently, there is negligible indication of a material impact on the water quality of downstream reaches of Teatree Hollow, given the limited surface flow reporting downstream since February 2023 and the consequently limited potential for transport of elevated pH, EC, dissolved aluminium and dissolved nickel.

Direct and indirect mining impacts, in the form of surface fracturing and associated flow diversion, have occurred at several locations in Teatree Hollow and the Teatree Hollow tributary, upstream of monitoring site TT-F1. Subject to the limitations described in Section 5.3 and 6.2 of **Appendix 9**, the timing and broad recession behaviour of recorded flows at TT-F1 during the review period appeared generally consistent with rainfall variability and historical observations. However, uncertainty in the LOP4 overflow and LDP16 discharge records prevented reliable quantification of natural streamflow or the magnitude of any mining-related streamflow reduction during the review period. No mining-related impact was identified from the available monitoring data for the monitored reach of the Bargo River (outside the Study Area). Surface water monitoring and data review will continue in accordance with the approved Water Management Plan (WMP).

In accordance with C12 of SSD 8445 and as detailed in the WMP, a Watercourse Corrective Action Management Plan (WCAMP) will be prepared for watercourses damaged by subsidence impacts. The WCAMP will be prepared in consultation with relevant government agencies, as defined in the WMP.

The WCAMP will be prepared and implemented (if required) at the cessation of subsidence movements associated with Tahmoor South mining.

Impacts observed at K64 are considered to be associated with high rainfall and flow events acting in combination with mining-induced subsidence (i.e. a direct mining impact has been confirmed). In accordance with the WMP, an increase in monitoring frequency is not required. Tahmoor Coal will continue visual inspections of K64 in accordance with the monitoring program to assess the extent and longevity of the observed impacts, with the need for remediation measures to be assessed at a later stage if required.

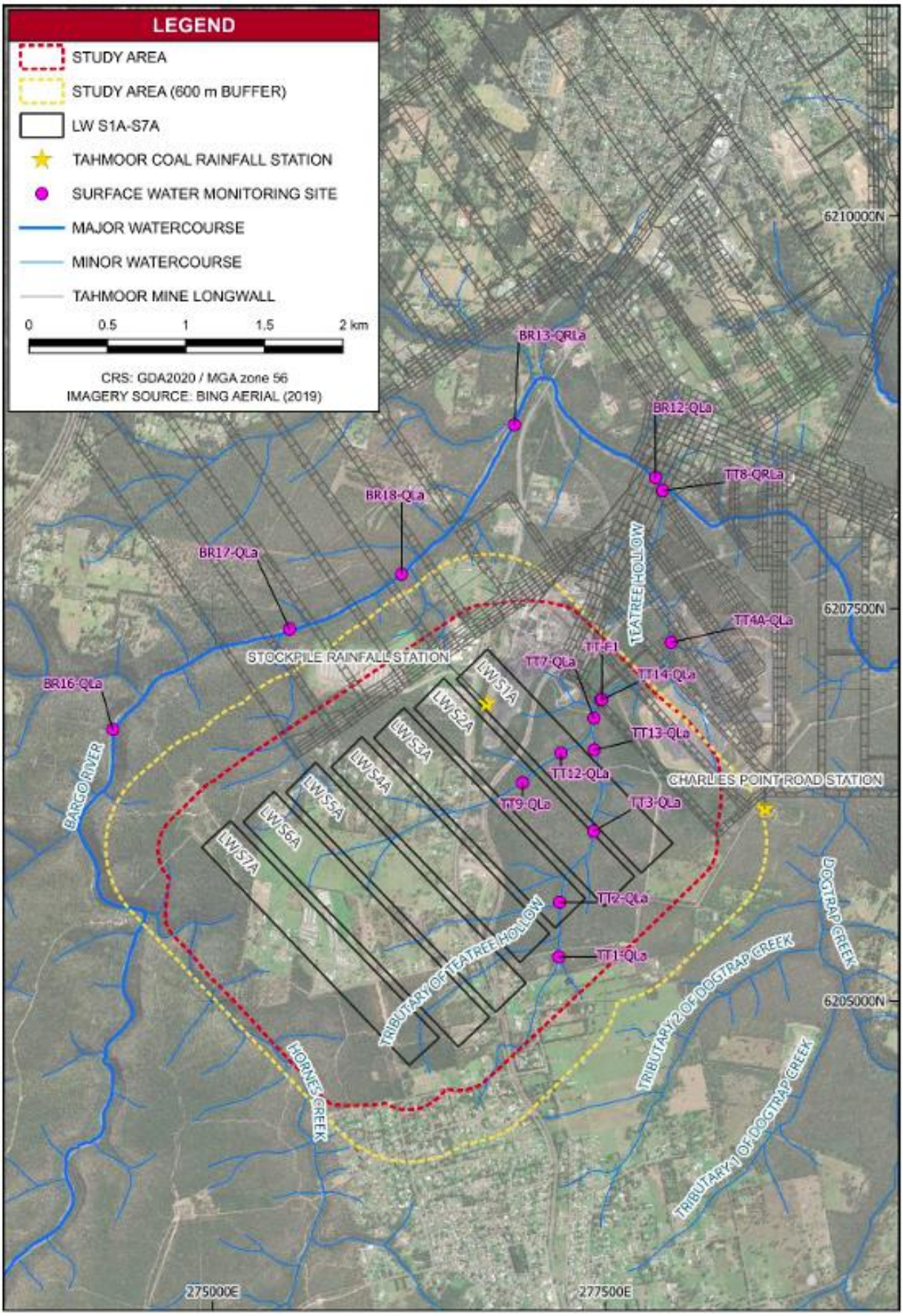


Figure 12-14 Tahmoor South A-Series Surface Water Monitoring Sites (source: ATC Williams, 2026a; Appendix 9)

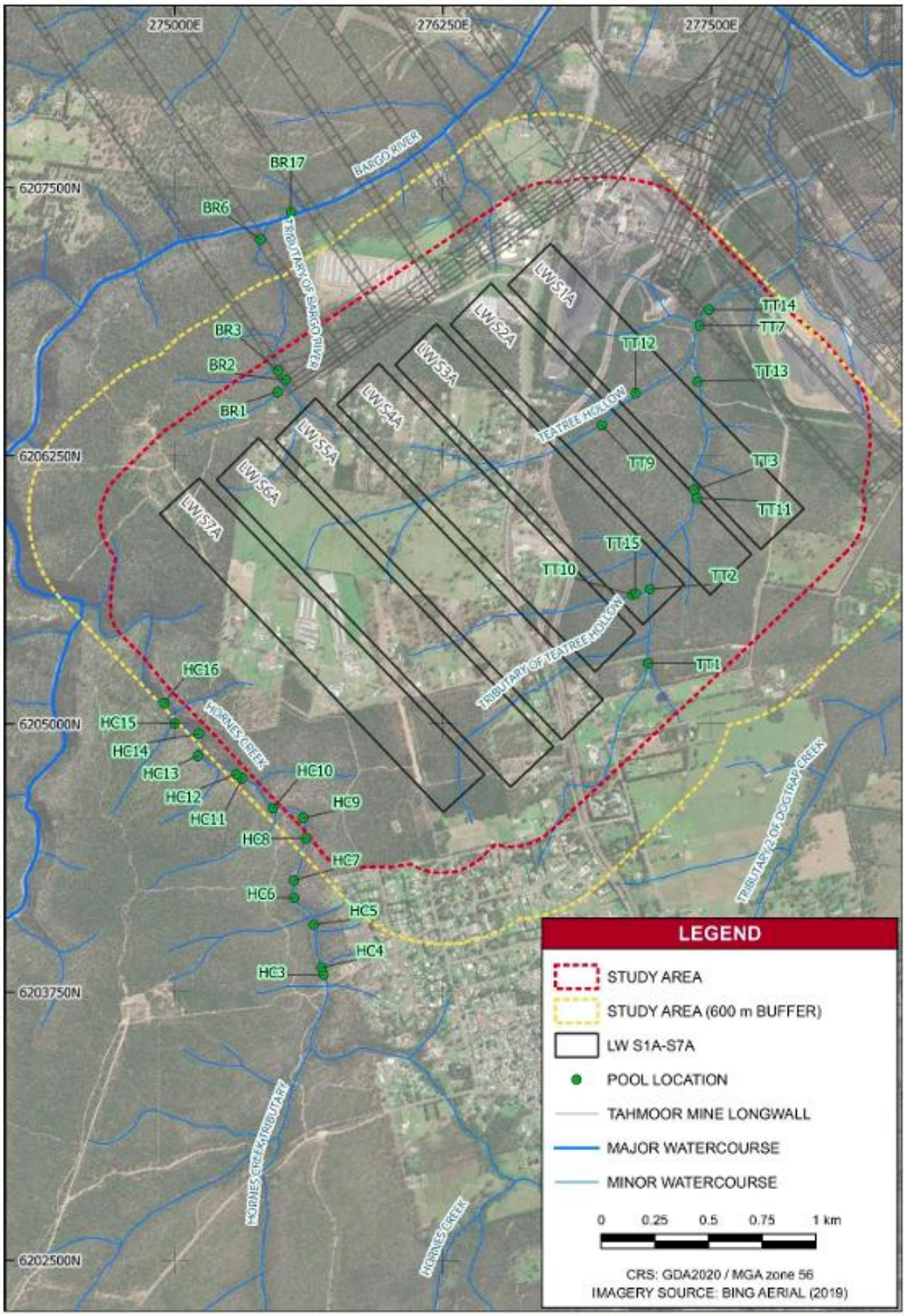


Figure 12-15 Tahmoor South A-Series Pool Visual Inspection Sites (source: ATC Williams, 2026a; Appendix 9)

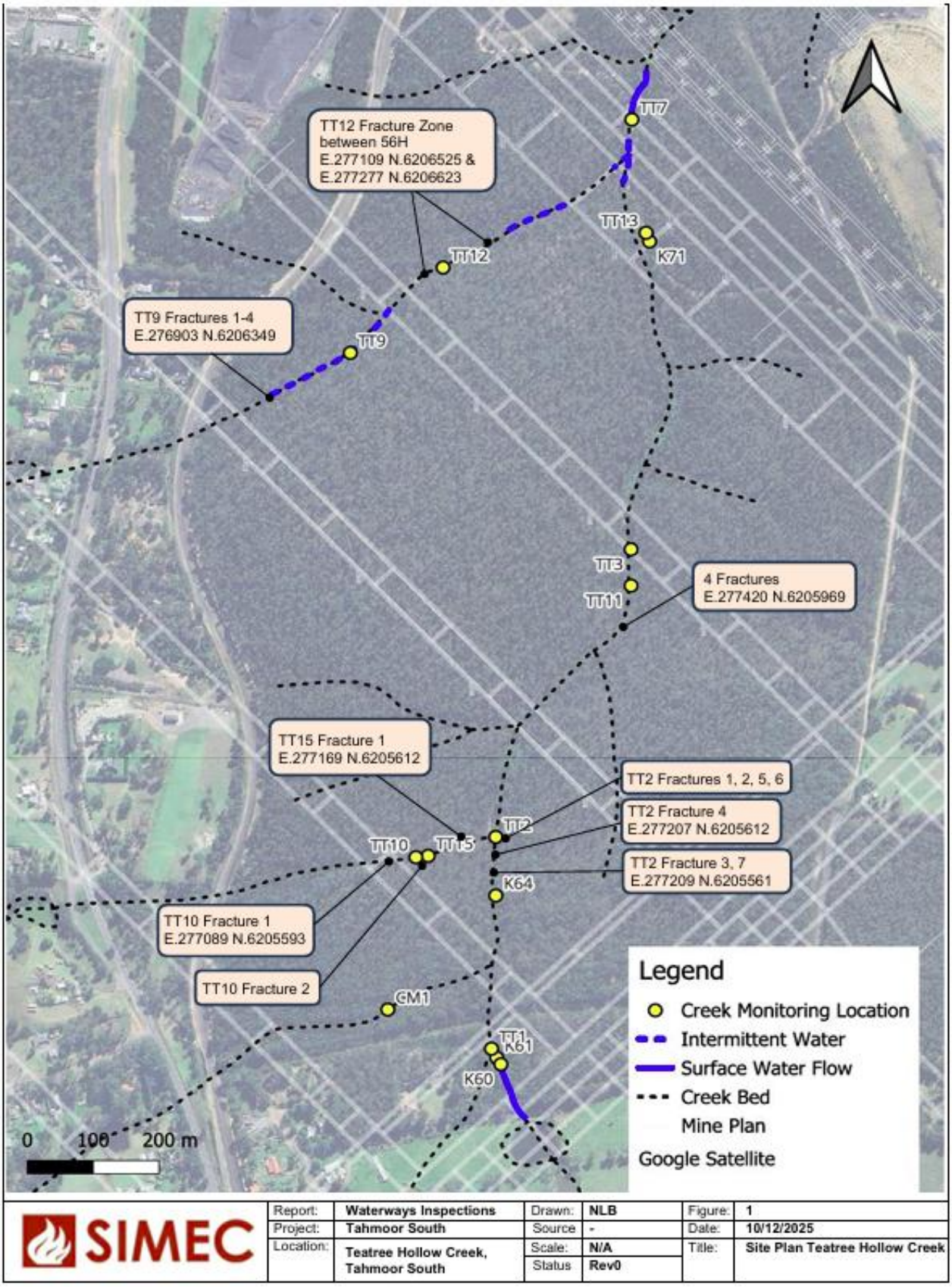


Figure 12-16 Visual depiction of surface water characteristics and physical effects during the December 2025 inspection of waterways report. (Report number: SWI-20251217)

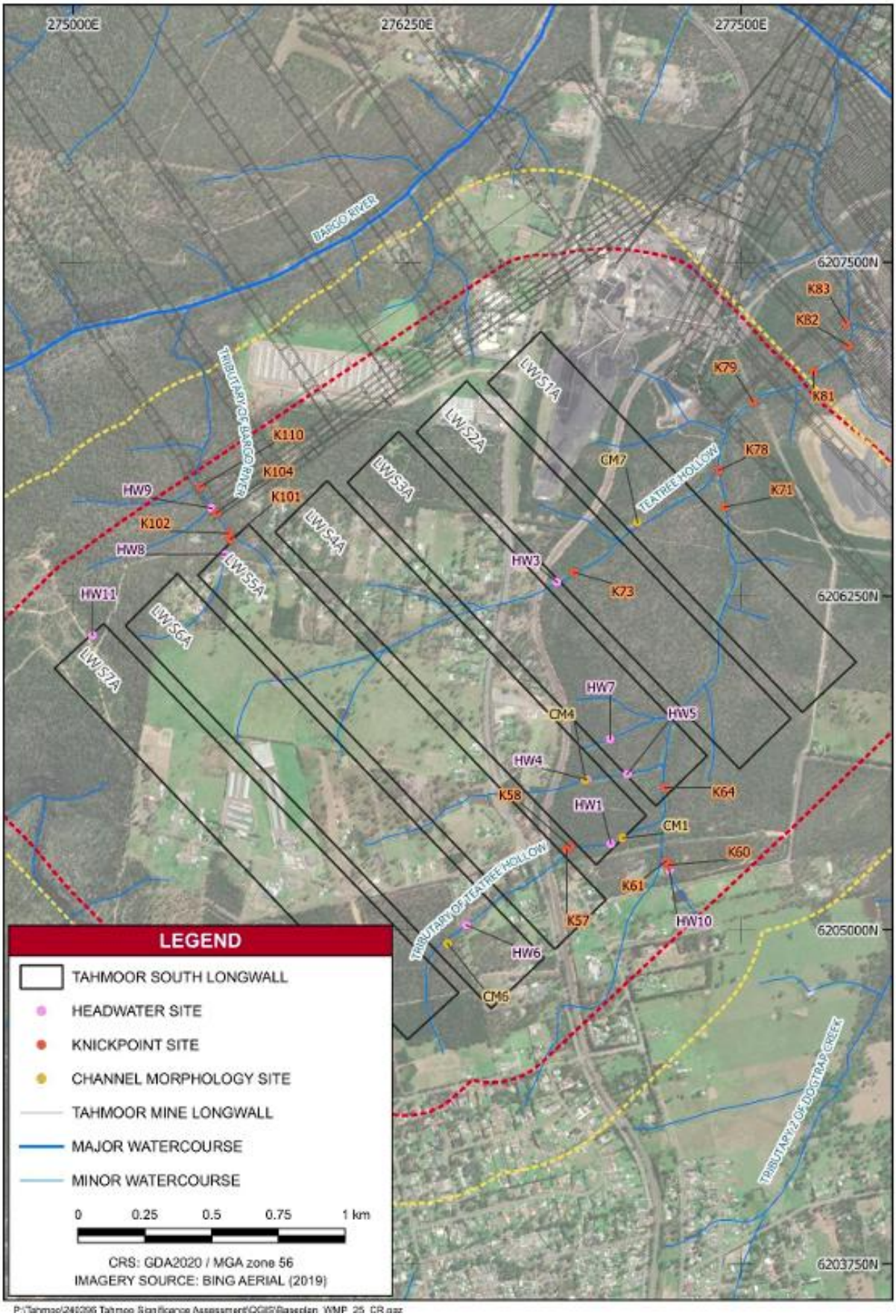


Figure 12-17 A-Series Morphology and Channel Stability Monitoring Sites (source: ATC Williams, 2026a; Appendix 9)

12.8.2 Further Improvements

12.8.2.1 Tahmoor South Domain

In accordance with C12 of SSD 8445 and as detailed in the WMP, a Watercourse Corrective Action Management Plan (WCAMP) will be prepared, if required, for watercourses damaged by subsidence impacts. The WCAMP will be prepared in consultation with relevant government agencies, as defined in the WMP and implemented at the cessation of subsidence movements associated with Tahmoor South mining.

The current monitoring program will continue in accordance with the LW S1A-S6A Water Management Plan. The next update will be provided as part of the next Annual Review to be provided to relevant agencies by 31 March 2026.

12.9 Groundwater Monitoring

12.9.1 Western Domain

12.9.1.1 Overview of Monitoring Results

The Tahmoor Western Domain Residual Subsidence Monitoring Plan has been implemented following extraction of Longwalls West 1 to West 4. The program monitors residual subsidence-related groundwater responses following completion of mining and during ongoing post-mining groundwater recovery within the Western Domain. In accordance with the monitoring requirements, groundwater monitoring at P14, P16, TNC036, TNC040 and WD02 is undertaken through continuous monitoring and annual review.

During the reporting period the following observations were recorded for groundwater levels and pressures:

- P14 (A, B, C & D) - Groundwater levels remain above baseline conditions, with all monitoring points classified as Stable (recovered).
- P16 (A, B & C) - Groundwater levels continue to recover following mining. P16A and P16B are classified as Recovering, while P16C has effectively returned to baseline conditions and is classified as Stable (recovered).
- TNC036:

  HBSS 65 m: Recovered and above baseline conditions.

  HBSS 97 m and BGSS 169 m: Continuing recovery with greater than 80% recovery achieved.

  BGSS 214 m: Recovering, although residual drawdown remains.

  BGSS 412.5 m and BUSM 463.5 m: Continue to exhibit depressurisation and are classified as Continuing change.
- TNC040:

  HBSS 65 m: Largely recovered and stable.

  WMFM 27 m: Recovered and above baseline conditions.
- WD02 - Monitoring indicates recovery in the upper Hawkesbury Sandstone, Newport Formation and upper Bulgo Sandstone, while deeper Bulgo Sandstone sensors continue to show declining pressures.

12.9.1.2 Summary of Monitoring results

The post-mining groundwater monitoring network indicates that monitored groundwater systems are generally classified as Stable (recovered), Recovering or Continuing change. Overall groundwater behaviour remains consistent with previous assessments.

Across the domain, behaviour varies according to position relative to the longwall sequence. Locations west of LW W1 (P16 and TNC036) show recovery in shallow groundwater units, while ongoing adjustment remains confined to the deeper Bulgo Sandstone and Bulli Coal Seam. Above and adjacent to LW W2 and LW W3 (WD02 and P14), shallow groundwater systems are stable or recovering, whereas some deeper Bulgo Sandstone sensors continue to adjust. South of LW W4 (TNC040), groundwater conditions are stable and largely recovered. There is no evidence that continuing deep depressurisation is propagating upward into the Hawkesbury Sandstone or other shallow aquifer units.

Analysis of the active Open Standpipes (OSPs) (P14 and P16) and Vibrating Wire Piezometers (VWPs) (TNC036, TNC040 and WD02) shows that groundwater levels within the Hawkesbury Sandstone and Wianamatta Formation are stable, recovered or continuing to recover towards pre-mining conditions. In contrast, deeper monitoring points within the Bulgo Sandstone and Bulli Coal Seam continue to exhibit localised post-mining adjustment and depressurisation. These deeper responses are largely independent of climatic variability and remain confined to the deeper hydrostratigraphic units.

As per the Western Domain Residual Subsidence Monitoring Plan, there are no active TARP triggers associated with groundwater monitoring under the residual monitoring program.

The current groundwater monitoring program should continue in accordance with the Western Domain Residual Subsidence Monitoring Plan. The 2025 assessment concluded that the Residual Subsidence Management Plan (RSMP) groundwater cessation criteria have not yet been achieved, as the deep groundwater system continues to adjust and flooding of the mine workings cannot yet be confirmed. Annual review of groundwater recovery should therefore continue.

12.9.2 Tahmoor South

The LW S1A-S6A Water Management Plan was prepared to manage the potential environmental consequences of LW S1A-S6A extraction on groundwater in accordance with Condition C8 of SSD 8445.

During this reporting period, the LW S1A-S6A Water Management Plan has been implemented to monitor groundwater:

- Shallow groundwater levels, quality and pressures, and deep groundwater levels / pressures – monthly monitoring data reviewed and reported; and
- Mine water intake – data for this reporting period reviewed and reported.

The following sections summarise the observations made during the reporting period for each groundwater category.

12.9.2.1 Groundwater Bore Levels

The Tahmoor South Monitoring Network comprises both Open Standpipes (OSPs) and Vibrating Wire Piezometers (VWPs). The standpipe piezometers can be used for monitoring water levels manually or with an automated datalogger (installed in 10 sites to date), as well as for collection of water samples for groundwater quality monitoring purposes. The VWPs are grouted and therefore can only be used for monitoring groundwater pressures, but do allow for multiple instruments to be installed at

different depths within a single borehole. The locations of groundwater monitoring bores are provided in **Figure 12-18**.

Further detail on groundwater level results, including graphs showing progressive groundwater levels, are provided in the 2025 Annual Groundwater Monitoring Report (**Appendix 10**).

Shallow OSP Bores and Private Bores

Groundwater level monitoring of shallow standpipe bores during the reporting period identified eight (8) exceedances which triggered TARP activations (**Appendix 10**).

These included three (3) at Level 1 (P51B, P53A, P53B), three (3) at Level 2 (P53C, P55A, P56A), and two (2) at Level 3 (P55B, P55C).

Groundwater level monitoring at private bores during the reporting period identified two (2) exceedances which triggered TARP activations (**Appendix 10**). This included two (2) at Level 1 (GW104659, GW109257).

TARP WMP8 pertains to shallow groundwater levels in open standpipes and private bores. Exceedances were recorded at ten locations during the reporting period. Level 3 was reached at P55B (eleven months), P55C (three months), Level 2 at P53C (five months), P56A (two months), P55A (one month), and Level 1 at P51B (eleven months), GW104659 (eight months), GW109257 (six months), P53B (six months), P53A (five months). Month counts are months spent at the worst level for each location reached. The pattern is one of continuation and partial recovery rather than escalation from the previous reporting period. Only P56A recorded a first exceedance during the period, and both Level 3 bores recovered over the period (Section 4.1, **Appendix 10**).

Level 3 Triggers:

- **P55B** returned a Level 3 exceedance which remained active from January to November 2025, continuing from May 2024. Recorded groundwater levels rose from 253.20 mAHD in January to 260.41 mAHD in November 2025, a recorded increase of 7.21 m, remaining below the 262.90 mAHD Level 3 threshold throughout. Of that increase, 0.97 m was a field offset/ recalibration step applied on 30 October 2025, so the underlying rise over the period is approximately 6.24 m. The exceedance was sustained while the bore recovers, which is a change in direction from the previous reporting period. P55B lies mid-panel above LW S3A. LW S3A extraction was completed on 17 December 2024 and the mine was in reduced operations with no mining occurring throughout the reporting period.
- **P55C** returned a Level 3 exceedance in three months of the reporting period, from January to March 2025, and remained below the 256.60 mAHD Level 3 threshold. From April P55C recovered progressively, returning to Level 2 in April and to Level 1 from May through November. It should be noted that P55C is one of five standpipes whose supplied record carries an applied datum offset as of 30 October 2025. The Level 3 exceedance at P55C was established on the January to March record and predates the offset by seven months, so it is unaffected.

Level 2 Triggers:

- **P53C** continued its Level 2 exceedance from January to May 2025, subsequently recovering to Level 1 in June to August 2025. After August, it recovered above its Level 1 threshold, holding no exceedance from September onward for the remainder of the reporting period. A breach of the Level 1 threshold was recorded in November 2025 however no Level 1 trigger.
- **P56A** returned a Level 2 exceedance during September and October 2025, with borehole levels dipping to below the 284.80 mAHD threshold for a Level 2 trigger. Level 1 was triggered from April through to August and remained at no exceedance level from January to March. P56A is new to WMP8 in this reporting period: no exceedance of any level had previously been

recorded at this bore since monitoring against the WMP8 triggers began. Its trend through the reporting period was one of progressive decline, and no data have been received following October 2025. P56A also returned the widest set of groundwater quality exceedances of any monitoring point in the network. The emergence of a new water level exceedance and a broad quality response at the same previously unaffected bore requires further investigation.

- **P55A** returned a Level 2 exceedance during August 2025 and a Level 1 exceedance during January to July and September to November 2025;

Level 1 Triggers:

- **P51B** returned a Level 1 exceedance during January to November 2025 against a threshold of 297.50 mAHD,
- **P53B** returned a Level 1 exceedance during January to June 2025 against a threshold of 255.80 mAHD,
- **P53A** returned a Level 1 exceedance during January to May 2025 against a threshold of 255.80 mAHD
- GW104659 (private borehole) returned a Level 1 exceedance during January to March, May, June, August and October to November 2025 against a threshold of 248.36 mAHD, and
- GW109257 (private borehole) returned a Level 1 exceedance during January to March, May, June and August 2025 against a threshold of 276.26 mAHD.

No landholders reported any adverse impacts to water supply use during the reporting period, and investigations have not identified direct evidence linking the observed drawdowns to mining activities.

No coal extraction occurred during the period, and the mine was in limited operations, so the levels recorded are a response to extraction completed before the period began. Rainfall was above the long-term average, so reduced recharge is therefore unlikely to be a primary contributing factor for the levels that remain below trigger (refer to Section 6.1.3 of **Appendix 10**).

Shallow VWPs (sensors <200 metres)

Shallow VWP monitoring during the reporting period identified five (5) intakes with exceedances that activated TARP triggers. These included one (1) at Level 1 (TBC032 (BGSS-200m)), one (1) at Level 2 (TBC032 (BHCS-181m)), three (3) at Level 3 (TBC024 (BGSS-185m), TBC024 (HBSS-139m), TBC032 (HBSS-131m)). Of these, only the TBC032 (HBSS-131m) and TBC032 (BGSS-200m) results are assessed as groundwater responses, while the TBC024 intakes and TBC032 (BHCS-181m) carry unresolved datums and are reported with that qualification (refer to Section 4.0 of **Appendix 10**).

Deep VWPs (sensors >200 metres)

No WMP10 exceedance was recorded during the reporting period. The 30 m threshold was breached at TBC032 (BGSS-294m) in two months and TBC032 (BGSS-237m) in one month. A breach is a single month outside the threshold, and an exceedance requires the breach to persist for three consecutive months or more, which did not occur within the period. Assessment covered the 37 deep intakes holding WMP10 criteria. Note also that the modelled prediction against which WMP10 is assessed generally under-predicts the observed drawdown at these intakes (refer to Section 4.0 of **Appendix 10**).

12.9.2.1.1 TARP WMP8 – Shallow Groundwater Level (Open Standpipes and Private Bores)

Background

During the reporting period, a number of groundwater TARP triggers occurred as summarised below:

- Monitoring bore P51B: Level 1 TARP triggered in January to November 2025;

- Monitoring bore P53A: Level 1 TARP triggered in January to May 2025;
- Monitoring bore P53B: Level 1 TARP triggered in January to June 2025;
- Monitoring bore P53C: Level 1 TARP triggered in June to August 2025; Level 2 TARP trigger in January to May 2025;
- Monitoring bore P55A: Level 1 TARP triggered in January to July, September to November 2025; Level 2 TARP trigger in August 2025;
- Monitoring bore P55B: Level 3 TARP triggered in January to November 2025;
- Monitoring bore P55C: Level 1 TARP trigger for May to November, Level 2 TARP trigger for April 2025; Level 3 TARP trigger in January to March 2025;
- Monitoring bore P56A: Level 1 TARP triggered in April to August 2025; Level 2 TARP trigger in September and October 2025;
- Private bore GW104659: Level 1 TARP triggered for January to March, May, June, August, October and November 2025; and
- Private bore GW109257: Level 1 TARP triggered for January to March, May, June and August 2025.

The spatial distribution of these triggers is illustrated in **Figure 12-18**. Further discussion of these triggers is provided in the 2025 Annual Groundwater Monitoring Report (refer to **Appendix 10**).

Actions and Responses Completed

Table 12-11 outlines the actions and responses that are required to be completed in accordance with Level 1, 2 and 3 TARP triggers for shallow groundwater level reduction (TARP WMP8), as well as how these actions and responses have been addressed.

Table 12-11 Actions and Responses for Level 1, 2 and 3 TARP Triggers for Groundwater Level Reduction (TARP WMP8)

Action / Response from TARP WMP8	Tahmoor Coal response
Actions	
Level 1, 2 and 3 TARP Continue monitoring and review of data as per monitoring program.	Monitoring and review of data is ongoing according to the monitoring program. Four open standpipes (P54A, P54B, P56B and P56C) hold WMP8 criteria in force but returned no data during 2025. P54A and P54B have been dry throughout; P56B and P56C ceased returning data during the period. These are listed with recommended actions in Table 10 of **Appendix 10**.
Level 1, 2 and 3 TARP Undertake an investigation to assess cause and determine if mining related.	An investigation to assess cause of the water level decline is provided in Section 4.0 of **Appendix 10**. P55B held Level 3 for eleven months of the reporting period. P55C was at Level 3 from January to March, eased to Level 2 in April and remained at Level 1 from May to November, and is therefore recovering rather than sustained. Level 2 was reached at P53C (five months), P56A (two months) and P55A (one month, August). The spatial distribution of the declines is consistent with mining-related depressurisation, although no single bore decline has been definitively attributed to mining and the investigation required to establish causation is ongoing. Rainfall over the period was above the long-term average (958.2 mm against 821.8 mm, with eight of twelve

Action / Response from TARP WMP8	Tahmoor Coal response
	months above average), so below-average recharge is not available as a contributing explanation for this reporting period.
Level 1, 2 and 3 TARP Undertake investigation to determine if the decline will impact the long-term viability of the affected water supply works.	Current drawdown associated with the exceedances remains localised to the P53, P55 and P56 nests above the extracted longwalls. There is no indication of extensive regional aquifer drawdown, and no decline has been identified that would affect the long-term viability of a registered water supply work.
Level 1, 2 and 3 TARP Discuss findings and obtain other relevant information from key specialists (e.g. subsidence monitoring results, surface water level results).	Relevant information was obtained from key specialists. Subsidence monitoring results for the period are reported in MSEC Subsidence Monitoring Report MSEC1430 Revision 36 (1 January to 31 December 2025) (**Appendix 11**), and surface water observations in the eleven ENRS routine waterway inspections undertaken during the period also summarised in the 2025 Annual Surface water Report (**Appendix 9)**. Tahmoor Coal has advised that no operational activities were undertaken during the reporting period, with the mine in care and maintenance throughout 2025.
Level 1, 2 and 3 TARP If the changes have been confirmed to be related to mining effects: For Open Standpipe Monitoring Bores: • For monitoring sites relevant to Thirlmere Lakes or associated with surface water monitoring sites, initiate groundwater – surface water interaction TARP. For Private Bores: • Initiate negotiations with impacts landowners as soon as practicable. Consider all reasonable and feasible options for remediation as relevant (e.g. extending the depth of the bore, establishment of additional bores, etc – as per Section 6.2.1.4 of the Water Management Plan).	For Open Standpipe Monitoring Bores: WMP12 remains initiated for the P53 and P55 nested bores and has been extended by the P51B and P56A results of this period. WMP13 (Thirlmere Lakes) has not been initiated. Regarding private bores, no private bore decline has been definitively attributed to mining. No landholder has reported impacts requiring ameliorative actions at this point in time.
Level 2 and 3 TARP Consider increasing monitoring and review of data at sites where Level 2 has been reached, subject to land access. Reasons for not increasing monitoring frequency could include confident identification causation that do not require further monitoring (e.g. singular anthropogenic impact resulting in water level change, or confirmed as a mining-related impact). Increased monitoring could be beneficial where commensurate responses in paired surface water monitoring locations have been observed.	Monitoring frequency was not increased during the reporting period. Continuous logging continued and manual dip rounds continued monthly. Loggers are installed in all P53 and P55 bores and the data are reviewed in accordance with the monitoring program.
Level 2 and 3 TARP Compare against base case and deterministic model scenarios.	TARP trigger levels accommodate the base case and deterministic model scenarios. With each model update, these levels will continue to be reviewed and revised as necessary.

Action / Response from TARP WMP8	Tahmoor Coal response
Level 2 and 3 TARP Review Water Management Plan and modify if necessary.	The Water Management Plan in force throughout the reporting period was WMP V6.0 (TAH-HSEC-00361 v6.0). Rev 7.0 was approved by DPHI on 6 August 2026 and the Groundwater Management Plan Rev 7.0 on 14 August 2026; both post-date this period. No modification was made during the reporting period.
Level 2 and 3 TARP For Private Bores: • Review CMAs in light of findings from further investigations and consider additional reasonable and feasible options.	Not applicable. No Level 2 or Level 3 WMP8 trigger occurred at a private bore during 2025; exceedances at GW104659 (eight months) and GW109257 (six months) were Level 1.
Level 3 TARP Increase monitoring and review of data frequency for sites where Level 3 has been reached, and cause is unknown, subject to land access.	The Level 3 triggers at P55B and P55C are discussed in Section 4.0 of **Appendix 10**. Both bores rose over the period - P55B by 7.21 m while remaining below its Level 3 threshold, and P55C returning to Level 1 from May 2025 - so neither is deteriorating. Continuous logging is already in place at all P53 and P55 bores and the data are reviewed in accordance with the monitoring program. On that basis no further increase was implemented. Note that this action is framed around the cause being unknown; causation has not been definitively established and remains under investigation.
Level 3 TARP Undertake a detailed investigation to assess the change in behaviour is related to mining effects (e.g. whether there has been subsidence induced fracturing, effect unrelated to mining or the prevailing climate).	Investigation for the period, including comparison against the monitored subsidence data and the climate record, is presented in Section 4.0 of **Appendix 10**. It establishes that below-average recharge is not an available explanation, rainfall having been above the long-term average, and that the spatial distribution of the declines is consistent with mining-related depressurisation. It does not definitively attribute any individual decline to mining; that determination requires ongoing subsidence GNSS dataset evaluation.
Responses	
Level 1, 2 and 3 TARP Report trigger exceedance to DPHI and key stakeholders.	Notification of this exceedance to DPHI and relevant stakeholders is completed as part of this report.
Level 1, 2 and 3 TARP Report trigger exceedance and investigation outcomes in Six Monthly Subsidence Impact Report and Annual Review.	Completed as part of this report.
Level 1, 2 and 3 TARP If the changes have been confirmed to be related to mining effects: For Private Bores: • Provide DPHI and key stakeholders with proposed corrective management actions (CMAs) for consultation (e.g. extending the depth of the bore, establishment of additional bores, compensation to affected landowners as	No private bore decline has been definitively attributed to mining, and no Level 2 or 3 WMP8 trigger occurred at a private bore during the reporting period. No landholder has reported impacts requiring ameliorative action.

Action / Response from TARP WMP8	Tahmoor Coal response
detailed in Section 6.2.1.4 of the Water Management Plan). • Implement CMAs, subject to land access (finalise negotiations and implement the agreed "make-good" arrangements). • Monitor and report on success of CMAs in Six Monthly Subsidence Impact Report and Annual Review.	
Level 2 and 3 TARP Advise DPHI and key stakeholders of any required amendments to Water Management Plan.	The Water Management Plan in force throughout the reporting period was WMP V6.0 (TAH-HSEC-00361 v6.0, effective 7 February 2025). Rev 7.0 was approved by DPHI on 6 August 2026 and the Groundwater Management Plan Rev 7.0 on 14 August 2026; both post-date this period. No amendment arising from this assessment is required at this time. Review can be reconsidered after the 2026 Annual Review.
Level 2 and 3 TARP For Private Bores: Provide findings of CMA review to DPHI and key stakeholders for consultation.	No CMA required at this point.
Level 2 and 3 TARP For Private Bores: Implement additional CMAs, subject to land access.	No CMA required at this point.
Level 3 TARP For Private Bores: • Develop a Rehabilitation Management Plan in consultation with DPHI and key stakeholders. • Implement Rehabilitation Management Plan, subject to land access.	No Level 3 WMP8 triggers occurred at private bores during the period.

Proposed Actions and Responses

The current monitoring program will continue in accordance with the approved LW S1A-S6A Water Management Plan. The next update will be provided as part of the next reporting requirement.

12.9.2.1.2 TARP WMP9 – Shallow Groundwater Pressure (VWP Sensors < 200 m depth)

Background

During the reporting period, a number of groundwater TARP triggers occurred in shallow VWP sensors, as summarised below:

- TBC032 (HBSS-131m): Level 3 TARP triggered for January to April and December 2025;
- TBC032 (BGSS-200m): Level 1 TARP triggered for January to April and December 2025.

The spatial distribution of these triggers is illustrated in Figure 12-18. Further discussion of these triggers is provided in the Groundwater Monitoring Report (refer to **Appendix 10**).

Actions and Responses Completed

Table 12-12 outlines the actions and responses that are required to be completed in accordance with Level 1, 2 and 3 TARP triggers for shallow groundwater pressure (TARP WMP9), as well as how these actions and responses have been addressed.

Table 12-12 Actions and Responses for Level 1,2 and 3 TARP Triggers for Shallow Groundwater Pressure (TARP WMP9)

Action / Response from TARP WMP9	Tahmoor Coal response
Actions	
Level 1, 2 and 3 TARP Continue monitoring and review of data as per monitoring program.	Monitoring and review of data is ongoing according to the monitoring program.
Level 1, 2 and 3 TARP Undertake an investigation to assess cause and determine if mining related.	An investigation to assess cause is provided in Section 4.0 of **Appendix 10**. Level 3 was recorded at TBC024 (BHCS-168m) and TBC024 (HBSS-139m) in all twelve months of the reporting period, at TBC024 (BGSS-185m) in four months (February to May) and at TBC032 (HBSS-131m) in five months. The two TBC024 results are not accepted as true groundwater responses. TBC024 (BHCS-168m) reported a mean head of 188.1 mAHD during 2025 from an intake whose elevation is 188.5 mAHD, placing 100% of its readings for the period below the sensor itself. A vibrating wire piezometer measures the pressure of the water standing above it, so a computed head beneath the intake cannot be a water level and the intake has been recorded as not assessed. TBC024 (HBSS-139m) lies within its physical envelope but reported a mean of 238.9 mAHD between intakes reading 303.2 mAHD at 117 m and 283.5 mAHD at 185 m, an inversion of 45 to 64 m within a single borehole over a single year, which is not a coherent vertical profile. Both are referred for physical inspection and datum verification (Section 8.0, **Appendix 10**). One further shallow intake, TBC034 (BHCS-176m), was excluded from assessment as 47% of its readings for the period are physically impossible. Its months are recorded as not assessed rather than as exceedances, and its replacement is recommended in Table 10 of **Appendix 10**.
Level 1, 2 and 3 TARP Discuss findings and obtain other relevant information from key specialists (e.g., subsidence monitoring results, surface water level results).	Relevant information was obtained from key specialists necessary to inform assessment (refer to Section 4 of **Appendix 10**).
Level 2 and 3 TARP Review deeper VWP data at monitored sites. Determine whether additional review of data is required.	Deeper VWP datasets were reviewed in conjunction with the shallow VWP exceedances. The deep intakes are assessed under WMP10 against the modelled drawdown prediction (Appendix D of **Appendix 10**). The 30 m threshold was breached at TBC032 (BGSS-294m) in two months of 2025, April and December, and at TBC032 (BGSS-237m) in one month, December. No breach persisted long enough to constitute an exceedance within the reporting period, but the first WMP10 exceedance in the program history subsequently registered at TBC032 (BGSS-294m) in February 2026, immediately after the reporting period close. Continued review of the deep intakes is therefore required.
Level 2 and 3 TARP Compare against base case and deterministic model scenarios.	Observed exceedances were compared against the base case and deterministic model scenarios in Appendix C of **Appendix 10**. Note that the modelled prediction materially under-predicts the observed drawdown at the

Action / Response from TARP WMP9	Tahmoor Coal response
	deep intakes, which is itself reported as a finding in Section 8.0 of **Appendix 10**.
Level 2 and 3 TARP Review Water Management Plan and modify if necessary.	The Water Management Plan in force throughout the reporting period was WMP V6.0 (TAH-HSEC-00361 v6.0). Rev 7.0 was approved by DPHI on 6 August 2026 and the Groundwater Management Plan Rev 7.0 on 14 August 2026; both post-date this period. No modification was made during the reporting period.
Level 3 TARP (action as per Level 2 TARP) Review deeper VWP data at monitored sites. Determine whether additional review of data is required.	Current drawdown associated with the exceedances is localised to the TBC024 and TBC032 sites. There is no indication of regional aquifer drawdown of a magnitude or extent beyond that predicted.
Level 3 TARP (action as per Level 2 TARP) Determine if review of additional existing VWP sites is required.	Review of all VWP sites is included in this reporting. TBC024 and TBC032 reported WMP9 triggers during the period, where in the previous reporting period TBC032 was the only site reporting WMP9 triggers. The accepted TBC024 result is a Level 3 exceedance at the BGSS-185m intake in four months; the twelve-month Level 3 results at the BHCS-168m and HBSS-139m intakes are not accepted as groundwater responses and are addressed above. On the accepted results TBC032 remains the more affected of the two sites, as it was in the previous reporting period.
Level 3 TARP (action as per Level 2 TARP) Consider increasing frequency of data review at sites where Level 2 has been reached or at other relevant sites. Reasons for not increasing monitoring frequency could include confident identification causation that do not require further monitoring (e.g. singular anthropogenic impact resulting in water level change or confirmed as a mining-related impact). Increased monitoring could be beneficial where commensurate responses in paired surface water monitoring locations have been observed.	Monitoring frequency was not increased. Continuous logging at the affected intakes already exceeds the frequency the program requires, and the data are reviewed according to the monitoring program. Causation has not been definitively established and remains under investigation (Section 4.0 of **Appendix 10**).
Level 3 TARP (action as per Level 2 TARP) Compare against base case and deterministic model scenarios.	TARP trigger levels accommodate the base case and deterministic model scenarios. With each model update, these levels will continue to be reviewed and revised as necessary.
Level 3 TARP (action as per Level 2 TARP) Review Water Management Plan and modify if necessary.	The Water Management Plan in force throughout the reporting period was WMP V6.0 (TAH-HSEC-00361 v6.0). Rev 7.0 was approved by DPHI on 6 August 2026 and the Groundwater Management Plan Rev 7.0 on 14 August 2026; both post-date this period. No modification was made during the reporting period.
Level 3 TARP Increase frequency of data review for sites where Level 3 has been reached and the cause is unknown.	The Level 3 triggers are discussed in Section 4.0 of **Appendix 10**. The accepted results are consistent with continued depressurisation following extraction completed before this reporting period; causation has not been definitively established.
Level 3 TARP Undertake a detailed investigation to assess if the change in behaviour is related to mining effects (e.g. whether there has been subsidence induced fracturing, other catchment changes, effect unrelated	Detailed investigation, including comparison against the monitored subsidence data and the climate record, has been completed. See Section 4.0 of **Appendix 10.**

Action / Response from TARP WMP9	Tahmoor Coal response
to mining or the prevailing climate). Commence/complete as soon as practicable.	
Level 3 TARP Undertake investigative to review model results in conjunction with field data.	Review of updated model results against field data will be undertaken with the next iteration of the Groundwater Management Plan. The under-prediction of drawdown identified in this period is recommended as a specific input to that review (Section 8.0 of **Appendix 10).**
Responses	
Level 1, 2 and 3 TARP Report trigger exceedance to DPHI and key stakeholders.	Notification of exceedances to DPHI and key stakeholders is completed as part of this report.
Level 1, 2 and 3 TARP Report trigger exceedance and investigation outcomes in Six Monthly Subsidence Impact Report and Annual Review	Completed as part of this report.
Level 2 and 3 TARP Advise DPHI and key stakeholders of any required amendments to Water Management Plan.	The Water Management Plan in force throughout the reporting period was WMP V6.0 (TAH-HSEC-00361 v6.0). Rev 7.0 was approved by DPHI on 6 August 2026 and the Groundwater Management Plan Rev 7.0 on 14 August 2026; both post-date this period.

Proposed Actions and Responses

The current monitoring program will continue in accordance with the LW S1A-S6A Water Management Plan. The next update will be provided as part of the next reporting requirement.

12.9.2.1.3 TARP WMP10 – Groundwater Level / Pressure Deep VWPs (>200 m depth excluding monitoring the Bulli Coal Seam)

During this reporting period, there have been no triggers under this TARP.

12.9.2.2 Groundwater Quality

12.9.2.2.1 Overview of Monitoring Results

Groundwater quality has been monitored monthly in the OSPs (monitoring network and private bores) since the commencement of extraction. The Tahmoor South Groundwater Monitoring Network, and the locations of groundwater monitoring bores is provided in **Figure 12-18**.

Groundwater quality monitoring (WMP11) identified exceedances of 11 analytes during the reporting period. Three (3) reached Level 3: dissolved Barium at four bores, dissolved Manganese at two bores and field Electrical Conductivity at two bores. The remaining eight (8) analytes reached Level 2 for dissolved Nickel, dissolved Aluminium, dissolved Iron, dissolved Lead, dissolved Strontium, dissolved Zinc, dissolved Lithium and field pH.

P56A is the most widely affected bore in the network, returning exceedances across eight analytes: Level 3 for dissolved barium, and Level 2 for field Electrical Conductivity, dissolved Aluminium, dissolved Iron, dissolved Manganese, dissolved Nickel, dissolved Lead and dissolved Zinc.

The following patterns are noted and for ongoing consideration through continued monitoring and review:

- P55 cluster: field EC reached Level 3 at P55A and P55B during the reporting period, and dissolved Manganese reached Level 3 at P55C. Groundwater levels at the same cluster rose

over the reporting period, so the salinity response does not coincide with declining levels as reported previously, and the two are not explained by a single process;

- REA4: sporadic multi-parameter exceedances, however no apparent trends; and
- Private Bores (GW104008, GW109257): sporadic multi-parameter exceedances, however no apparent trends.

Further detail on groundwater quality results, including graphs showing progressive groundwater quality results, are provided in the 2025 Annual Groundwater Monitoring Report (refer to **Appendix 10**). Further detail and discussion of TARP triggers for groundwater level are also discussed in the below sections.

Electrical conductivity and pH

Field electrical conductivity reached Level 3 at P55A and P55B, the same nest holding the most adverse water level response in the network.

Metal concentrations

Dissolved barium remains the most widely exceeded analyte at Level 3, as it was in the previous reporting period, but its distribution has extended, P56A having joined P53B, P53C and REA4. Dissolved barium exceedances were recorded at P53B, P53C, P56A and REA4, all reaching Level 3.

12.9.2.2.2 TARP WMP11 – Groundwater Quality (Open Standpipes and Private Bores)

Background

During the reporting period, a number of groundwater TARP triggers occurred in the following boreholes, as summarised below:

- GW104659: Level 2 TARP triggered for dissolved Aluminium in February and May 2025;
- GW109257: Level 2 TARP triggered for dissolved Manganese in January to March and May 2025; Level 3 TARP triggered for dissolved Manganese in June, August, October and November 2025;
- GW112473: Level 2 TARP triggered for dissolved Manganese in February 2025;
- P51A: Level 2 TARP triggered for field pH in August 2025;
- P52: Level 2 TARP triggered for dissolved Nickel in January 2025;
- P53B: Level 2 TARP triggered for dissolved Strontium in August, October and November 2025; Level 3 TARP triggered for dissolved Barium in January to March, May, June, August, October and November 2025;
- P53C: Level 3 TARP triggered for dissolved Barium in January to March, May, June, August, October and November 2025;
- P55A: Level 3 TARP triggered for field EC in January to March, May, June, August, October and November 2025;
- P55B: Level 2 TARP triggered for field EC in January and November 2025; Level 3 TARP triggered for field EC in February, March and May 2025;
- P55C: Level 2 TARP triggered for dissolved Manganese in March, May, June and August 2025; Level 3 TARP triggered for dissolved Manganese in October and November 2025;
- P56A: Level 2 TARP triggered for dissolved Aluminium in February; dissolved Barium in January to March and June; field EC in January to March; dissolved Iron in January and February; dissolved Lead in February, March, June and August; dissolved Manganese in March, June and August; dissolved Nickel in February, March, June and August; and dissolved Zinc in February,

March, June and August 2025; Level 3 TARP triggered for field EC in dissolved Barium in August 2025; and

- REA4: Level 2 TARP triggered for dissolved Iron in March and June; dissolved Lithium in January and February; dissolved Manganese in March, June and August; and dissolved Nickel in February and March 2025; Level 3 TARP triggered for dissolved Barium in January to March, May and June 2025.

Groundwater quality exceedances were recorded for eleven analytes across twelve monitoring locations during the period, of which three analytes reached Level 3 (barium, field electrical conductivity, manganese). This is an escalation from the previous reporting period, in which barium at Level 2 was the only formal quality exceedance.

Causation has not been established. The bores holding quality exceedances are not the same set as those holding level exceedances, and the level responses were upward over the period while the quality exceedances persisted, so the two are not explained by a single process. Investigation is recommended in Section 8.0 of **Appendix 10**.

Actions and Responses Completed

Table 12-13 outlines the actions and responses that are required to be completed in accordance with Level 1 and 2 TARP triggers for Groundwater Water Quality (TARP WMP11), as well as how these actions and responses have been addressed.

Table 12-13 Actions and Responses for Level 1 and 2 TARP Triggers for Groundwater Water Quality (TARP WMP11)

Action / Response from TARP WMP11	Tahmoor Coal response
Actions	
Level 1 and 2 TARP Continue monitoring and review of data as per monitoring program.	Routine groundwater quality monitoring continued and an internal review of quality trends at the affected sites was undertaken, taking the climate record for the period into account.
Level 1 and 2 TARP Undertake an investigation to assess cause and determine if mining related.	Investigation of the 2025 exceedances is provided in Section 4.0 of **Appendix 10**. The most widespread Level 3 analyte was dissolved Barium (P53B, P53C, P56A and REA4), followed by dissolved Manganese (GW109257 and P55C) and field Electrical Conductivity (P55A and P55B). Causation remains uncertain; the affected analytes are consistent with a change in redox conditions rather than with an introduced source but cannot be definitively attributable to mining from available data.
Level 1 and 2 TARP Undertake investigation to demonstrate if the change in quality will impact the long-term viability of the affected water supply works.	Assessment indicates that the current exceedances do not compromise the long-term viability of the affected water supply works. No impact to a landholder supply has been reported.
Level 1 and 2 TARP Discuss findings and obtain other relevant information from key specialists (e.g., subsidence monitoring results, surface water level results).	Groundwater quality exceedances were reviewed against the subsidence and surface water information for the period. No direct linkage was identified; further monitoring will continue.
Level 1 and 2 TARP If the changes have been confirmed to be related to mining effects: • For Private Bores: Initiate negotiations with impacted landholders as soon as practicable.	Exceedances were recorded at private bores during the period: GW109257 reached Level 3 for dissolved Manganese, and GW104659 (dissolved Aluminium) and GW112473 (dissolved Manganese) reached Level 2. The GW109257 result continues a Level 3 first recorded in

Action / Response from TARP WMP11	Tahmoor Coal response
Consider all reasonable and feasible options for remediation as relevant. This could include potential for implementation of make-good provisions as per Section 6.2.1.4 of the Water Management Plan for affected private bore owners (e.g. provision of access to an alternative source of water). • For Open Standpipe Monitoring Bores: For monitoring sites relevant to Thirlmere Lakes or associated with surface water monitoring sites, initiate groundwater – surface water interaction TARP.	August 2024 and is not a new condition. None has been confirmed as related to mining effects, and the action above is conditional on that confirmation, so make-good has not been initiated. Attribution is addressed in Section 4.0 of **Appendix 10** and is recommended for further investigation in Section 8.0 of **Appendix 10**.
Level 1 and 2 TARP Consider increasing monitoring and review of data at sites where Level 2 has been reached, subject to land access. Reasons for not increasing monitoring frequency could include solid identification causation that do not require further monitoring (e.g. singular anthropogenic impact resulting in water quality change).	No increase in water quality monitoring frequency was implemented for this reporting period. Given that WMP11 reached Level 3 on three analytes during the period, an increase in per-bore sampling frequency at the affected bores is recommended in Section 8.0 of **Appendix 10** for consideration.
Level 1 and 2 TARP Review Water Management Plan and modify if necessary.	The Water Management Plan in force throughout the reporting period was WMP V6.0 (TAH-HSEC-00361 v6.0). Rev 7.0 was approved by DPHI on 6 August 2026 and the Groundwater Management Plan Rev 7.0 on 14 August 2026; both post-date this period. No modification was made during the reporting period.
Level 1 and 2 TARP For Private Bores: • Review CMAs in light of findings from further investigations and consider additional reasonable and feasible options	No private bore quality exceedance has been attributed to mining, so a review of CMAs has not been triggered. Given that GW109257 reached Level 3 during the period, confirmation of the attribution is recommended in Section 8.0 of **Appendix 10**.
Responses	
Level 1, 2 and 3 TARP Report trigger exceedance to DPHI and key stakeholders.	Exceedances reported to DPHI and key stakeholders as part of this report.
Level 1, 2 and 3 TARP Report trigger exceedance and investigation outcomes in Annual Review	Completed as part of this report.
Level 1, 2 and 3 TARP If the changes have been confirmed to be related to mining effects: **For Private Bores:** • Provide DPHI and key stakeholders with proposed corrective management actions (CMAs) for consultation (e.g, provision of access to an alternative source of water as detailed in Section 6.2.1.4 of the Water Management Plan). • Implement CMAs, subject to land access. • Monitor and report on success of CMAs in Six Monthly Subsidence Impact Report and Annual Review.	Not applicable. No exceedances at private bores attributed to mining.
Level 2 TARP	The Water Management Plan in force throughout the reporting period was WMP V6.0 (TAH-HSEC-00361 v6.0).

Action / Response from TARP WMP11	Tahmoor Coal response
Advise DPHI and key stakeholders of any required amendments to Water Management Plan.	Rev 7.0 was approved by DPHI on 6 August 2026 and the Groundwater Management Plan Rev 7.0 on 14 August 2026; both post-date this period. No amendment arising from this assessment is required at this time.
Level 2 TARP **For Private Bores:** • Provide findings of CMA review to DPHI and key stakeholders for consultation. • Implement additional CMAs, subject to land access.	Not applicable. No CMAs triggered.

Proposed Actions and Responses

The current monitoring program will continue in accordance with the LW S1A-S6A Water Management Plan. The next update will be provided as part of the next reporting requirement.

12.9.2.3 Groundwater and Surface Water Interaction

12.9.2.3.1 Overview of Monitoring Results for Groundwater – Surface Water Connectivity

Groundwater monitoring is undertaken within nearby vicinity of surface watering at multiple locations to assist with the review of groundwater – surface water interaction. Namely to assist with defining if surface flow changes identified are attributable to baseflow loss due to groundwater depressurisation resultant from mining activities.

The groundwater-surface water interaction monitoring program (WMP12) recorded exceedances at seven (7) bores during the reporting period, corresponding to WMP8 exceedances at bores aligned with surface water monitoring sites: three (3) at Level 1 (P51B, P53A, P53B), two (2) at Level 2 (P53C, P55A) and two (2) at Level 3 (P55B, P55C). Further detail of the groundwater – surface water interaction review is provided in the 2025 Annual Surface Water Monitoring Report (**Appendix 9**) and the 2025 Annual Groundwater Monitoring Report (**Appendix 10**).

WMP12 pertains specifically to the monitoring of potential impacts on groundwater – surface water interactions. Assessment under this TARP is initiated if a TARP WMP8 trigger is confirmed to be related to mining effects.

12.9.2.3.2 TARP WMP12 – Groundwater – Surface Water Interaction

Background

Numerous triggers of TARP WMP8 occurred during this reporting period. WMP12 is enacted when one of the TARP bores (those associated with surface water monitoring units) has triggered TARP WMP8. The bores for which TARP WMP12 has been enacted include:

- P53 nested bores – associated with surface water site TT13-Qla; and
- P55 nested bores – associated with surface water site TT1-QLa.

As discussed in Section 12.9.2.1.1, the following bores triggered a TARP level for TARP WMP8:

- Monitoring bore P51B: Level 1 TARP triggered for January to November 2025;
- Monitoring bore P53A: Level 1 TARP triggered for January to May 2025;
- Monitoring bore P53B: Level 1 TARP triggered for January to June 2025;
- Monitoring bore P53C: Level 1 TARP triggered for June, July and August 2025; Level 2 triggered for January to May 2025;

- Monitoring bore P55A: Level 1 TARP triggered for January to July, September to November 2025; Level 2 triggered for August 2025;
- Monitoring bore P55B: Level 3 TARP triggered for January to November 2025; and
- Monitoring bore P55C: Level 1 triggered for May to November 2025, Level 2 TARP triggered in April 2025; Level 3 TARP triggered for January to March 2025.

WMP12 triggers remained active at the P53 and P55 clusters during the reporting period, and surface water exceedances were recorded concurrently. ENRS Visual Creek inspections assigned Level 3 to seven Teatree Hollow pools - TT2, TT3, TT9, TT10, TT11, TT12 and TT15 - in every inspection of the period, with TT13 fluctuating between Normal and Level 3 (Section 4.4, **Appendix 10**).

Further discussion of this review is provided in the 2025 Annual Groundwater Monitoring Report (**Appendix 10**).

Actions and Responses Completed

Table 12-14 outlines the actions and responses that are required to be completed in accordance with Level 1, 2 and 3 TARP triggers for groundwater – surface water interaction (TARP WMP12), as well as how these actions and responses have been addressed.

Table 12-14 Actions and Responses for Level 1, 2 and 3 TARP Triggers for Groundwater – Surface Water Interactions (TARP WMP12)

Action / Response from TARP WMP12	Tahmoor Coal response
Actions	
Level 1, 2 and 3 TARP Continue monitoring and review of data as per monitoring program.	Monitoring and review of data is ongoing according to the monitoring program.
Level 1, 2 and 3 TARP Undertake an investigation to assess cause and determine if mining related.	An investigation into whether the WMP8 triggers indicate a change in groundwater - surface water interaction has been completed and is provided in Section 4.0 of **Appendix 10**. P55B held Level 3 for eleven months; P55C was at Level 3 from January to March before easing to Level 1 from May. Level 2 was reached at P53C (five months) and P55A (one month).
Level 1, 2 and 3 TARP Discuss findings and obtain other relevant information from key specialists (e.g. subsidence monitoring results, surface water level results).	Relevant information was obtained from key specialists necessary to inform assessment and discussed (refer to Section 4.0 of **Appendix 10**).
Level 2 and 3 TARP Increase frequency of data review to fortnightly at sites where Level 2 has been reached, subject to land access. Reasons for not increasing frequency could include solid identification causation that do not require further monitoring (e.g. singular anthropogenic impact resulting in water level change).	Loggers are installed in all P53 and P55 bores and the data are reviewed monthly. Review frequency was not increased to fortnightly during the period; the monitoring record shows logger cadence and manual dip frequency essentially unchanged from 2024. The bores concerned rose over the period rather than declining further, and no extraction was undertaken on the domain during the period.
Level 2 and 3 TARP Compare against base case and deterministic model scenarios.	Completed as part of trigger level review.
Level 2 and 3 TARP Review manual water level measurements for additional monitoring sites to identify potential spatial trends in water level decline.	Review of spatial trends of water level was undertaken as part of this report (Section 4.0 and Appendix D of **Appendix 10**).

Action / Response from TARP WMP12	Tahmoor Coal response
Level 2 and 3 TARP Review surface water data to assess for surface water level decline at relevant site.	Surface water data were reviewed in conjunction with the groundwater data. The surface water record for the period is the series of eleven routine waterway inspections undertaken by ENRS. Those inspections assign Level 3 to seven Teatree Hollow pools - TT2, TT3, TT9, TT10, TT11, TT12 and TT15 - in every inspection of 2025. TT13 fluctuated between Normal and Level 3 across the period. On the inspection record the surface water TARP was therefore in Level 3 exceedance at seven pools throughout the reporting period, and that is the position reported here.
Level 2 and 3 TARP Review CMAs in light of findings from further investigations and consider additional reasonable and feasible options.	CMAs have not been triggered at this point. ATC Williams (2025) records that a Watercourse Corrective Action Management Plan will be prepared (if required) under Condition C12 of SSD 8445 at the cessation of subsidence movements in the affected reaches.
Level 2 and 3 TARP Review Water Management Plan and modify if necessary.	The Water Management Plan in force throughout the reporting period was WMP V6.0 (TAH-HSEC-00361 v6.0). Rev 7.0 was approved by DPHI on 6 August 2026 and the Groundwater Management Plan Rev 7.0 on 14 August 2026; both post-date this period. No modification was made during the reporting period.
Level 3 TARP Increase frequency of data review for sites where Level 3 has been reached and cause is unknown, subject to land access.	The review frequency is considered sufficient: continuous logging is in place at all P53 and P55 bores and the data are reviewed in accordance with the monitoring program. Causation has not been definitively established and remains under investigation (Section 4.0 of **Appendix 10**).
Level 3 TARP Undertake a detailed investigation to assess if the change in behaviour is related to mining effects (e.g. whether there has been subsidence induced fracturing, other catchment changes, effect unrelated to mining or the prevailing climate). Report to be commenced and completed as soon as practicable.	Investigation was undertaken as part of this reporting and builds on the previous detailed analysis of groundwater - surface water interaction.
Responses	
Level 1, 2 and 3 TARP Report trigger exceedance to DPHI and key stakeholders.	Notification of exceedances to DPHI and relevant key stakeholders is undertaken as part of this report.
Level 1, 2 and 3 TARP Report trigger exceedance and investigation outcomes in Six Monthly Subsidence Impact Report and Annual Review.	Completed as part of this report.
Level 1, 2 and 3 TARP If the changes have been confirmed to be related to mining effects: • Provide DPHI and key stakeholders with proposed corrective management actions (CMAs) for consultation (e.g. extending the depth of the bore, establishment of additional bores, compensation to affected landowners as detailed in Section 6.2.1.4 of the Water Management Plan). • Implement CMAs, subject to land access.	It remains unlikely that extraction is currently impacting groundwater - surface water interactions in a manner requiring landholder notification. This finding should be revisited once the surface water trigger status is reconciled.

Action / Response from TARP WMP12	Tahmoor Coal response
• Monitor and report on success of CMAs in Six Monthly Subsidence Impact Report and Annual Review.	
Level 2 and 3 TARP Provide findings of CMA review to DPHI and key stakeholders for consultation.	CMA not required at this point.
Level 2 and 3 TARP Implement additional CMAs, subject to land access.	CMA not required at this point.
Level 2 and 3 TARP Advise DPHI and key stakeholders of any required amendments to Water Management Plan, including reporting on relationship of observations to baseline and deterministic model scenarios, as necessary.	The Water Management Plan in force throughout the reporting period was WMP V6.0 (TAH-HSEC-00361 v6.0). Rev 7.0 was approved by DPHI on 6 August 2026 and the Groundwater Management Plan Rev 7.0 on 14 August 2026; both post-date this period.
Level 3 TARP Develop a Rehabilitation Management Plan in consultation with DPHI and key stakeholders.	Not required at this point.
Level 3 TARP Implement Rehabilitation Management Plan, subject to land access.	Not required at this point.

Proposed Actions

The current monitoring program will continue in accordance with the LW S1A-S6A Water Management Plan. The next update will be provided as part of the next reporting requirement.

12.9.2.3.3 TARP WMP13 – Groundwater Bores Monitoring for Thirlmere Lakes

During this reporting period, there have been no triggers under this TARP.

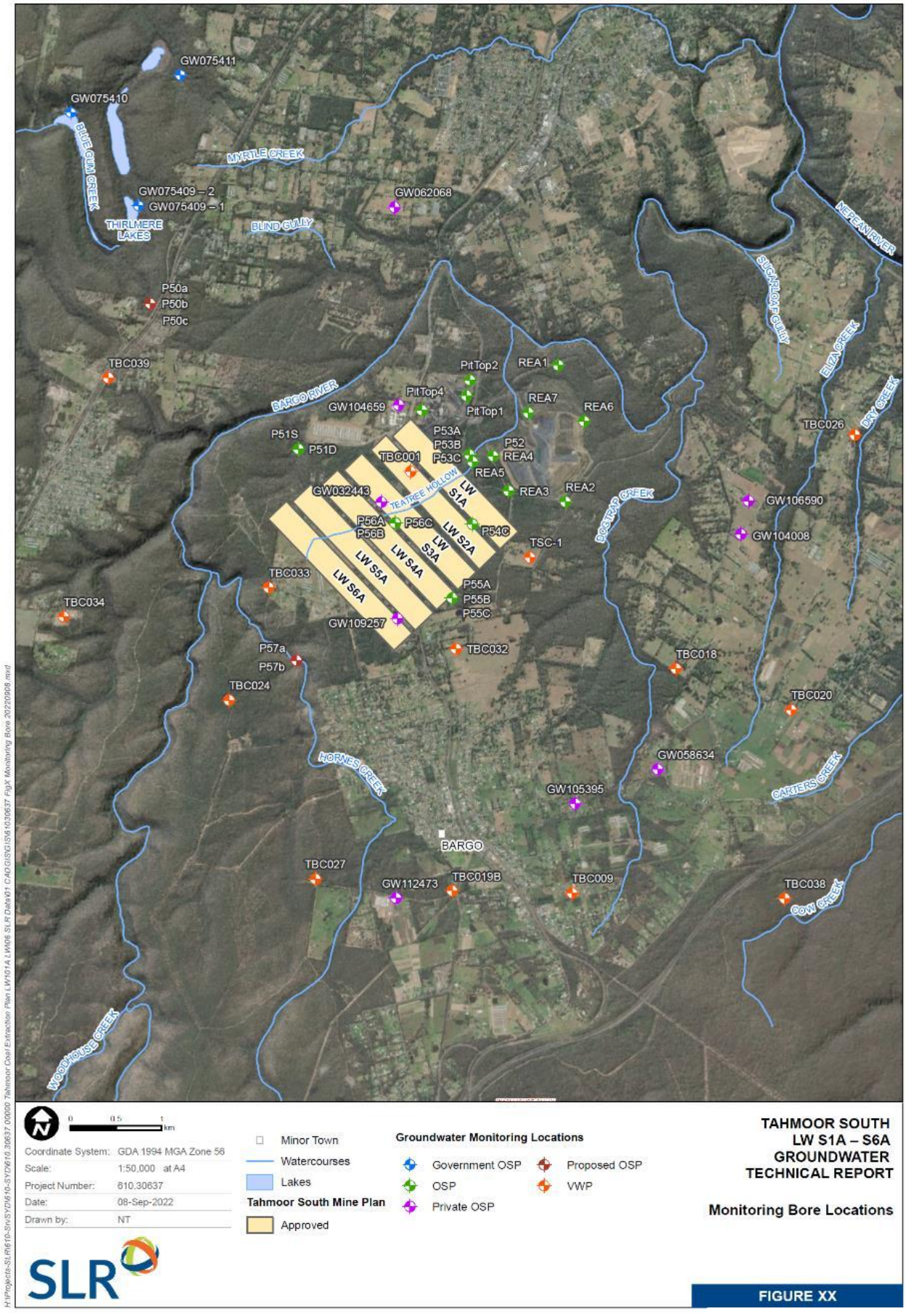


Figure 12-18 LW S1A-S6A Groundwater Monitoring Site (source: LW S1A-S6A Water Management Plan)

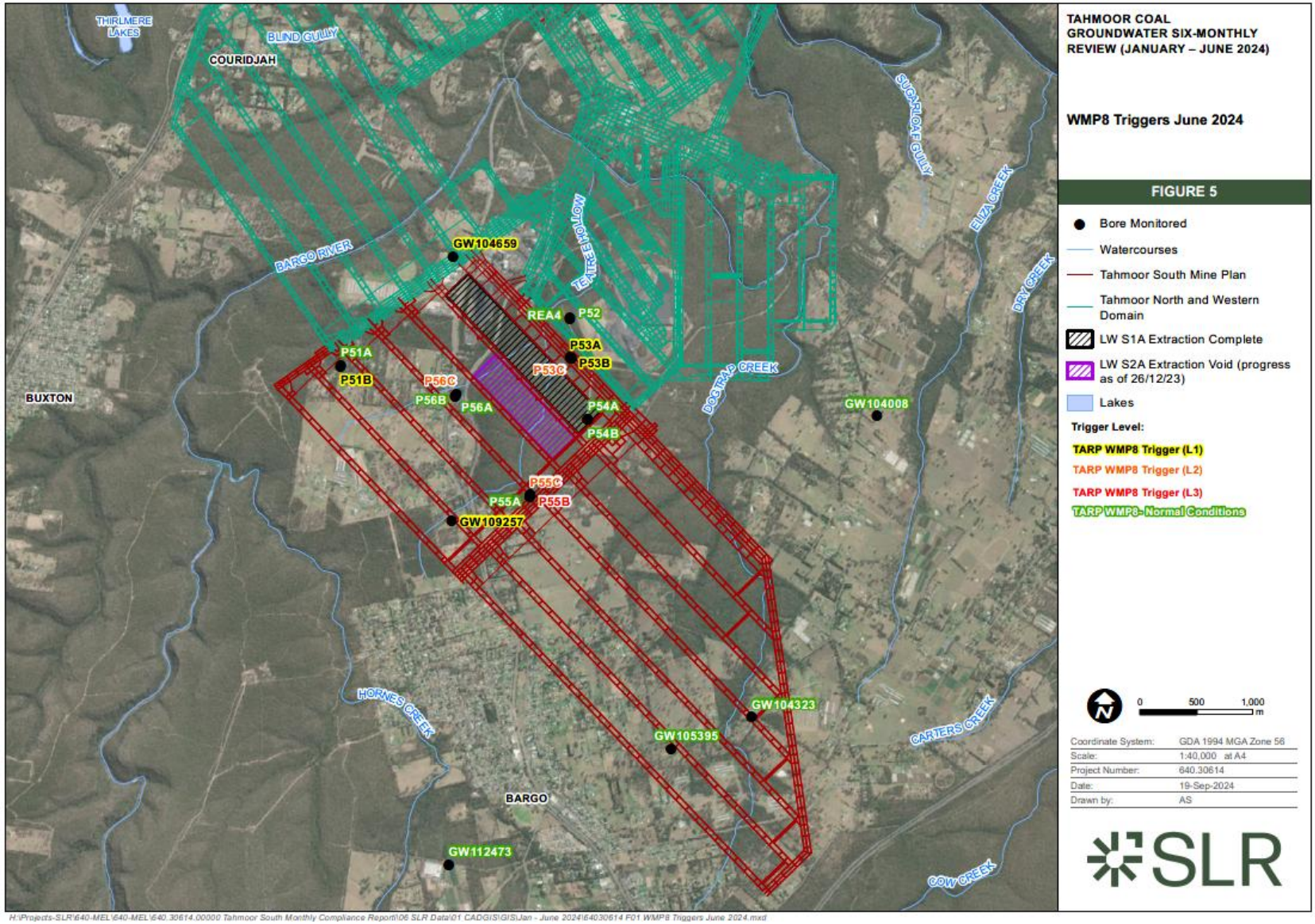


Figure 12-19 WMP8 Shallow Groundwater Level (Open Standpipes and Private Bores) TARP triggers (source SLR, 2025; Appendix C).

12.10 Land Monitoring

12.10.1 Tahmoor South Domain

The LW S1A-S6A Land Management Plan was prepared to manage the potential environmental consequences of LW S1A-S6A extraction on cliffs, natural steep slopes, dams, agricultural land, and land in general in accordance with Condition C8 of SSD 8445 for the Tahmoor South Domain.

During this reporting period, the LW S1A-S6A Land Management Plan was implemented to monitor the following landscape features. Following completion of Longwall S3A in December 2024, no further longwall extraction occurred and therefore only post-mining monitoring requirements were applicable during the reporting period. These monitoring requirements are outlined below:

- Cliffs – visual inspection at the completion of mining by a geotechnical engineer (Cliff BC1 after LW S6A, Cliff BC2 after LW S3A, S4A, S5A and S6A). No further visual inspections have been required during this reporting period;
- Natural steep slopes – monthly visual inspection during active subsidence period and then quarterly for 12 months post-mining by a geotechnical engineer. This monitoring and reporting were completed by Douglas Partners (available on request);
- Farm dams – dam embankment integrity and water level observation every month the active subsidence period and then quarterly for 12 months by a geotechnical consultant. This monitoring was completed by Douglas Partners on a monthly basis, and reported in their reports (available on request); and
- Agricultural land – weekly inspections along local roads, monthly inspections of farm dams and visual inspection at the completion of each longwall for land within the predicted limit of subsidence for each longwall. This monitoring is covered by the farm dam inspections and built features monitoring. An inspection of agricultural land was completed in December 2024 following the completion of LW S3A (report available on request).

The following sections summarise the observations made during the reporting period for each land category.

12.10.1.1 Cliffs

12.10.1.1.1 Overview of Monitoring Results

The locations of cliffs (BC1 and BC2) within the LW S1A-S6A Study Area are illustrated in **Figure 12-20**.

Cliff BC2 inspection was completed by a geotechnical engineer on 25 March 2025 as per LW S1A-S6A Land Management Plan. No mine subsidence impacts were observed.

No inspection was required for BC1 cliff during the monitoring period.

12.10.1.1.2 TARP LMP1 – Cliffs

During this reporting period, there have been no triggers under this TARP.

12.10.1.2 Natural Steep Slopes

12.10.1.2.1 Overview of Monitoring Results

The locations of natural steep slopes within the LW S1A-S6A Study Area are illustrated in **Figure 12-20**.

During the reporting period, visual and photographic surveys of natural steep slopes were completed quarterly for 12 months as per LW S1A-S6A Land Management Plan for features affected by mine subsidence and currently outside the subsidence zone. With the exception of steep slope WC1, no visual observations or cracks, localised ground bulging, buckling or shearing was observed at natural steep slopes.

The following describes the inspection findings at WC1:

- In March 2025 a new 5mm wide crack had formed in a boulder in the base of the creek near 'Big Pool' in Wirrimbirra Creek at the steep slope WC1.

From a geotechnical viewpoint, the observed movement/cracking observed at WC1 is not considered to be detrimental to the stability of the rocky outcrop or the water carrying capacity of the creek. No additional movement is discernible between the two boulders / blocks since this initial observation. No TARPs have been triggered in relation to this movement.

12.10.1.2.2 TARP LMP2 – Natural Steep Slopes

During this reporting period, there have been no triggers under this TARP.

12.10.1.3 Dams

12.10.1.3.1 Overview of Monitoring Results

The location of dams within the LW S1A-S6A Study Area are illustrated in **Figure 12-21**.

During the reporting period, visual and photographic surveys for subsidence impacts on dams were completed by a geotechnical engineer quarterly for 12 months as per LW S1A-S6A Land Management Plan for features previously affected by mine subsidence and currently outside the subsidence zone.

Visual inspections of dams located in the active subsidence zone did not identify any mining-related impacts during the reporting period.

12.10.1.3.2 TARP LMP3 – Farm Dams

During this reporting period, there have been no triggers under this TARP.

12.10.1.4 Agricultural Land

12.10.1.4.1 Overview of Monitoring Results

Agricultural land identified within the LW S1A-S6A Study Area are illustrated on **Figure 12-22**.

Inspections points were set up prior to the commencement of LW S1A mining to provide vantage of agricultural land within the LW S1A-S6A Study Area. The purpose of the surveys is to note whether change has occurred to agricultural land, and to assist in determining if any change can be attributed to mining impacts. Surveys noted the presence of erosion, condition of boundary and internal fencing components, paddock gate condition, out-building condition, paddock dam condition, presence of any surface slumping or cracking, and the presence of vegetation dieback.

During the reporting period, visual and photographic surveys of agricultural land have been completed as part of inspections for local roads.

An end of panel agricultural land inspection was completed by SLR Consulting on 18 December 2024 following completion of LW S3A as per LW S1A-S6A Land Management Pan. The inspection did not identify any significant mining-related impacts to agricultural land, and site conditions were generally consistent with previous inspections and existing land uses

12.10.1.4.2 TARP LMP4 – Agricultural Land

During this reporting period, there have been no triggers under this TARP.

12.10.2 Further Improvements

Monitoring of natural landscape features will continue in accordance with the LW S1A-S6A Land Management Plan.

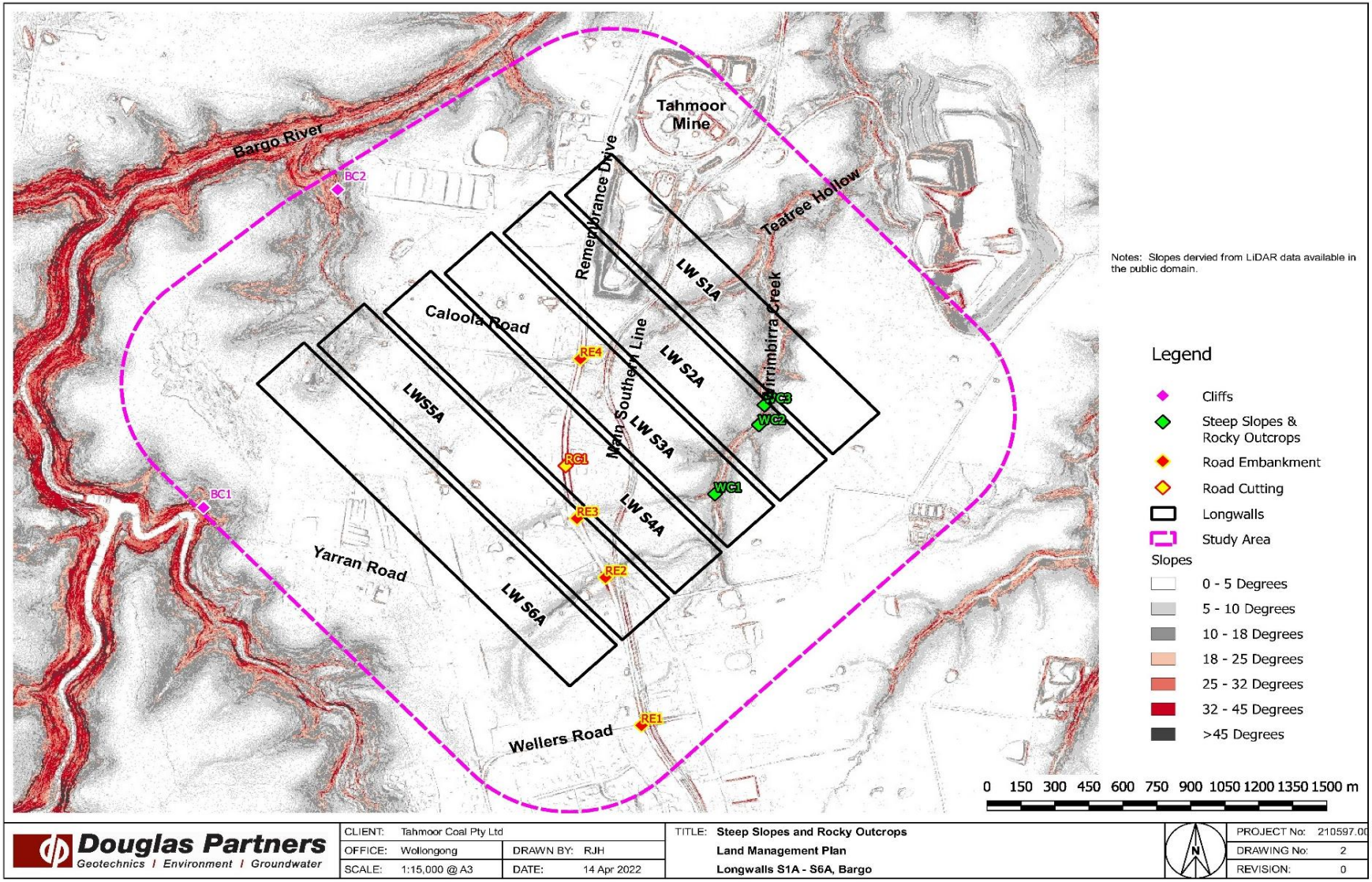


Figure 12-20 Cliffs and natural slopes within the LW S1A-S6A Study Area

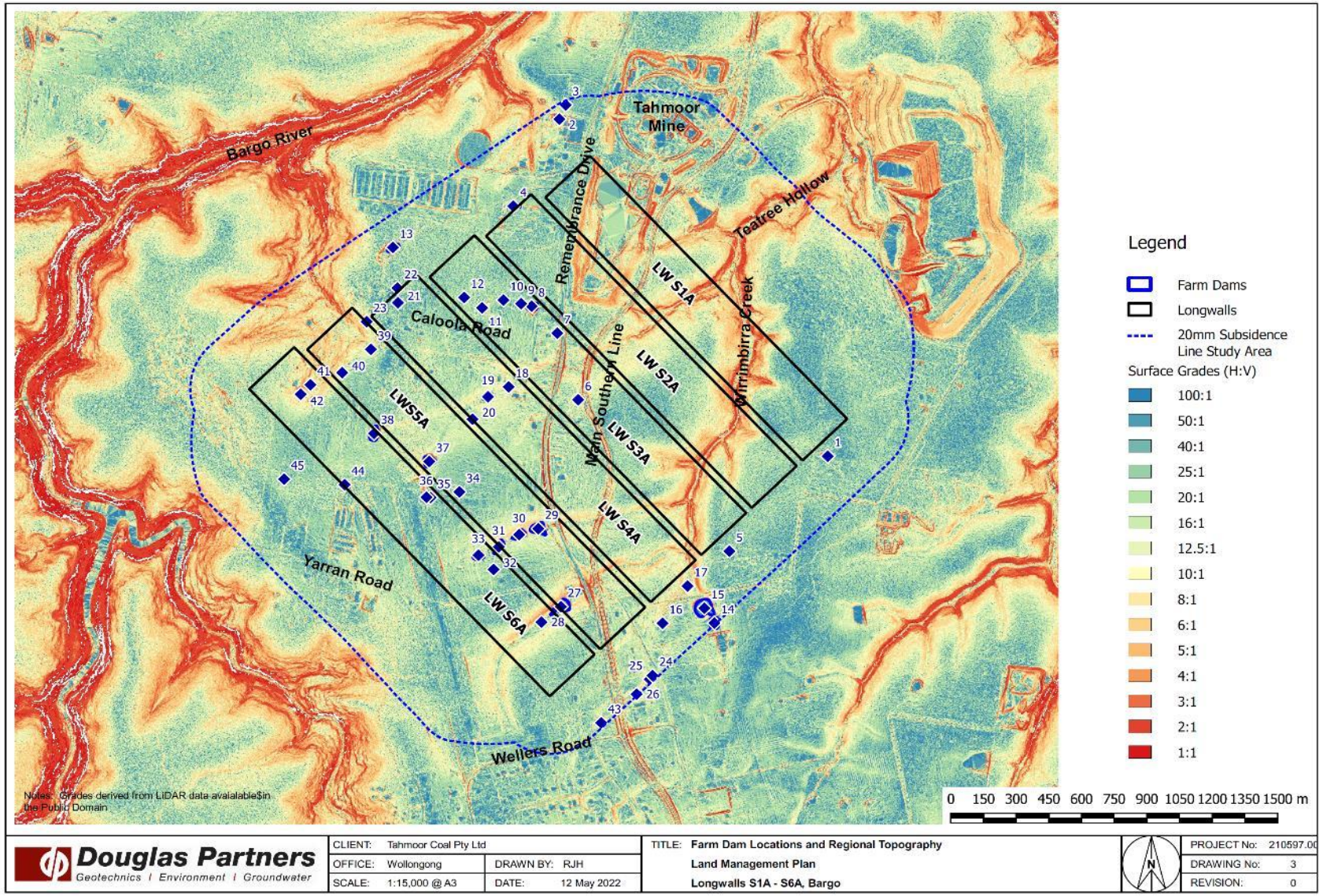


Figure 12-21 Dams within the LW S1A-S6A Study Area

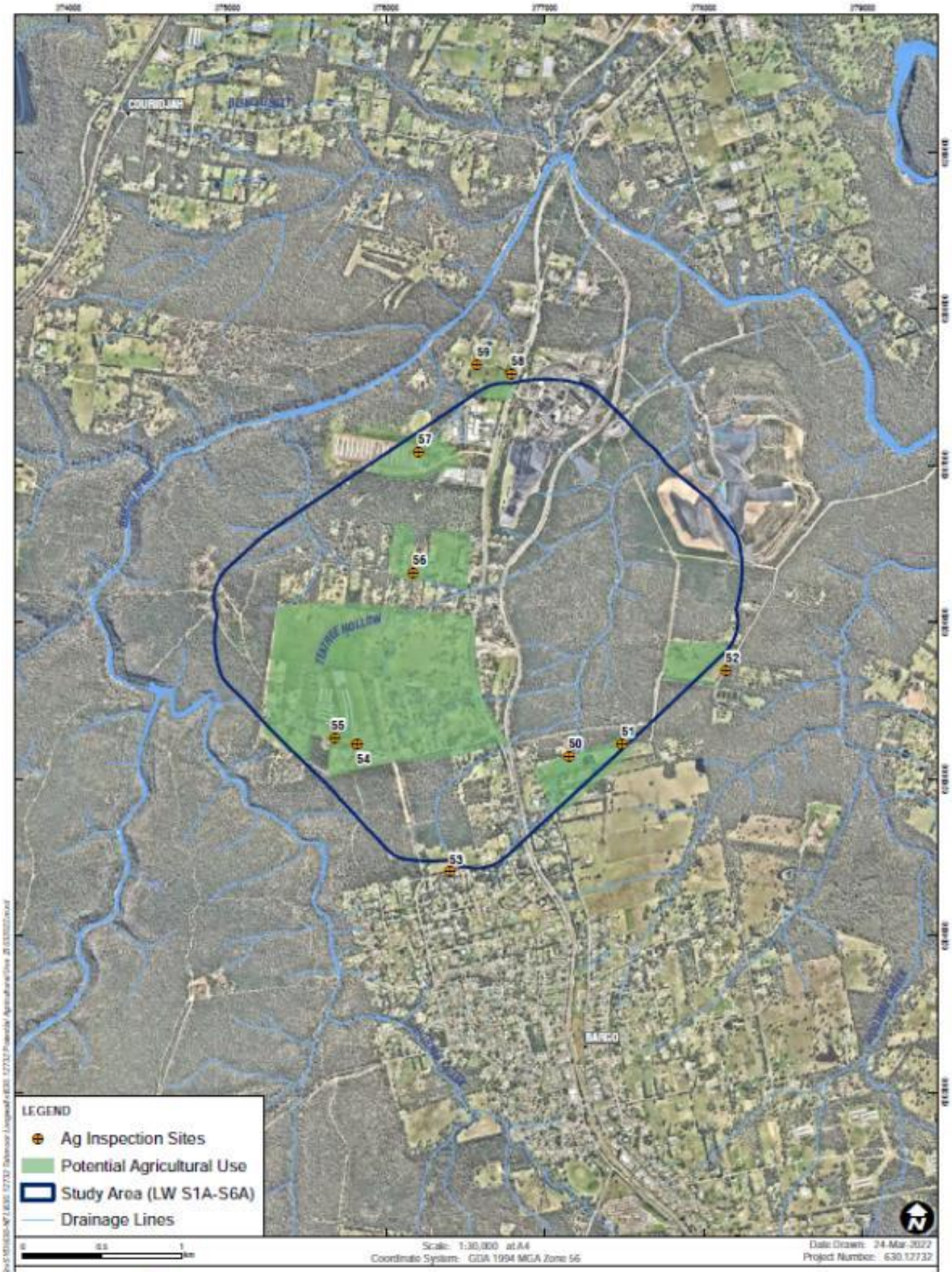


Figure 12-22 Agricultural land and inspection sites within the LW S1A-S6A Study Area

13 Site Water Management

13.1 Groundwater

13.1.1 Environmental Management

Groundwater is managed across Tahmoor Mine in accordance with the approved Groundwater Management Plan (available on the Tahmoor Coal website), which has been prepared to address the requirements of Condition B7 of the SSD 8445 development consent for Tahmoor South.

Historically, longwalls have been extracted within the Tahmoor North and Western Domains at a depth of approximately 450m in the Bulli Coal Seam. Current longwall extraction within the Tahmoor South Domain is occurring at depths of approximately 385m in the Bulli Coal Seam.

Groundwater piezometer boreholes located across Tahmoor Mine's Pit-top and REA areas are monitored quarterly for water quality and continual water level loggers downloaded by a third-party contractor (for locations refer to **Figure 13-1).**

Since 2024, pit-top monitoring boreholes/piezometers PT1 and PT2 were deemed inaccessible due to being buried during construction activities in 2023. Works are currently on hold to re-instate them and are scheduled for the next reporting period. PT4 has also experienced some access difficulty and has been inaccessible since March 2025 (see **Figure 13-2**). It is noted that PT4 results have shown a stable water level during the period retrieved shown in **Figure 13-2**.

REA piezometer levels have recorded relatively stable levels throughout 2025 (see **Figure 13-3**) with REA 1 last able to be downloaded June 2025. For further information, refer to **Appendix 6** for pit-top and REA water quality data.

The location of all current Tahmoor South monitoring boreholes are shown in **Figure 12-18** and **Figure 12-19** and reported in the 2025 Groundwater Monitoring Report (refer to **Appendix 10**).

There were no reportable incidents related to groundwater pollution during the reporting period.



Figure 13-1 Locations of Piezometers at Pit-top and the REA areas

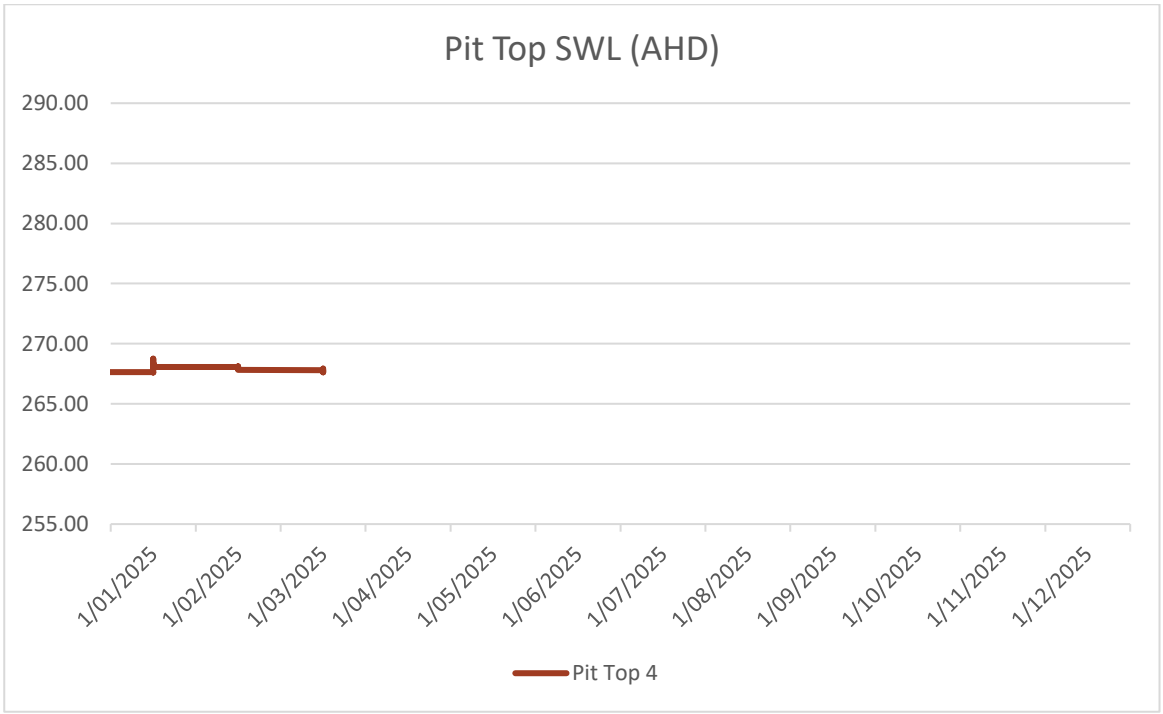


Figure 13-2 Piezometer groundwater levels for Pit-top (PT4) for 2025.

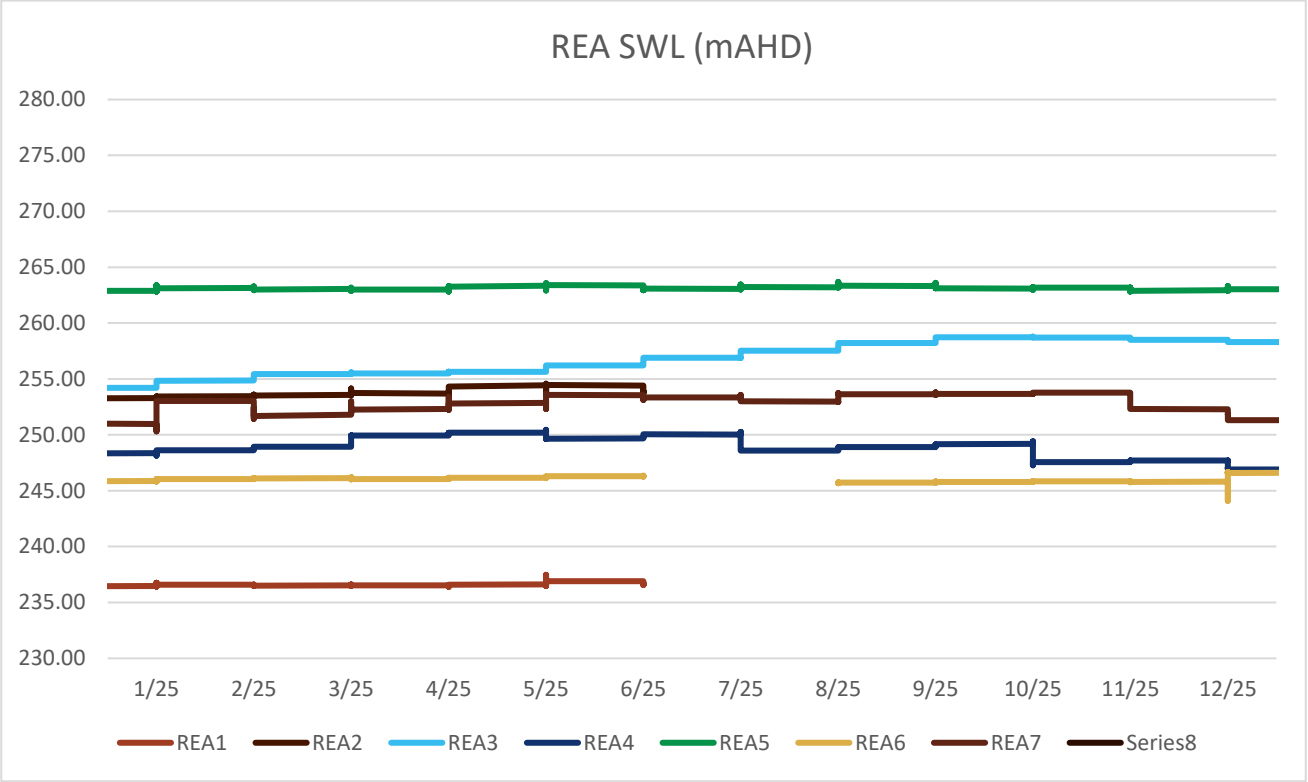


Figure 13-3 Piezometer groundwater levels for REA for 2025.

13.1.2 Water Access Licences Environmental Performance

During the reporting period the below water take has been calculated in accordance with condition B24 of consent SSD 8445.

Tahmoor Mine operates in accordance with Water Licence 36442, which allows an extraction limit of 1642 ML per annum (i.e. water year) of groundwater make from underground workings as part of the de-watering process.

The cumulative groundwater make for water year 2024/25 was 1,090ML, which is within the groundwater entitlement of 1,642 ML/y (refer to **Table 13-1** and **Figure 13-4**). The cumulative groundwater make between July to December 2025 was 533 ML, which is within the annual groundwater entitlement for the FY26 Water year. **Table 13-1** provides a summary of groundwater outflow from 2015 to 2025 and is illustrated in **Figure 13-4**

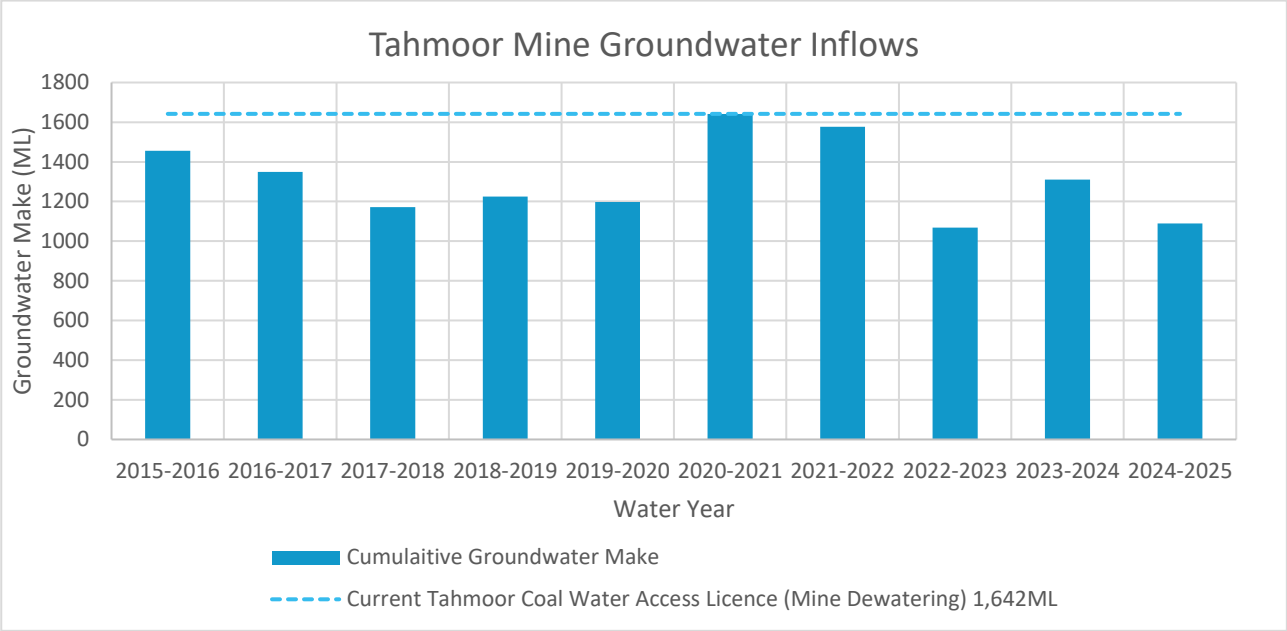


Figure 13-4 Calculated Groundwater Inflow Annual Volume (Water Year/Financial Year).

Table 13-1 Summary of Groundwater Outflow

Water Year/Financial Year	Water Licence #	Water Sharing plan/source and management zone (as applicable)	Entitlement per water year (ML)	Total Water Make into Underground (ML) per water year *includes vent air and water entrained in ROM
FY19 (July 18-June 19)	36442	Greater Metropolitan Region Groundwater Sources / Sydney Basin Nepean Groundwater Source	1642	1266*
FY20 (July 19-June 20)	36442	Greater Metropolitan Region Groundwater Sources / Sydney Basin Nepean Groundwater Source	1642	1348*
FY21 (July 20-June 21)	36442	Greater Metropolitan Region Groundwater Sources / Sydney Basin Nepean Groundwater Source	1642	1628*
FY22 (July 21-June 22)	36442	Greater Metropolitan Region Groundwater Sources / Sydney Basin Nepean Groundwater Source	1642	1347*
FY23 (July 22-June 23)	36442	Greater Metropolitan Region Groundwater Sources / Sydney Basin Nepean Groundwater Source	1642	1068*
FY24 (July 23 - June 24)	36442	Greater Metropolitan Region Groundwater Sources / Sydney Basin Nepean Groundwater Source	1642	1310*
FY25 (July 24 - June 25)	36442	Greater Metropolitan Region Groundwater Sources / Sydney Basin Nepean Groundwater Source	1642	1090*

An independent contractor calculated the estimated water take from surface water sources, as presented in **Table 13-2**. This water take was within entitlement of Water Access Licences held during the reporting period.

Table 13-2 Water take estimates from surface water sources for the 2025 reporting period

WAL	Water Sharing Plan	Water source	Entitlement	FY25	July-Dec 2025
25777 43656 SWC871469	Greater Metropolitan Region Unregulated River Water Sources WSP 2023	Maldon Weir	41ML	35ML*	17.5ML*
45204		Stonequarry Creek	25ML	8ML*	4ML*

*Maximum annual Water Take during active mining for Stonequarry Creek and Maldon Weir calculated from 2025 EMM Water Strategy.

13.1.3 Further Improvements

Tahmoor Coal will continue to implement the Tahmoor South Groundwater Management Plan, and ongoing monitoring and reporting will occur in accordance with the conditions in the relevant water licences.

13.2 Surface Water

13.2.1 Environmental Management

Surface water is managed across Tahmoor Mine in accordance with the approved Water Management Plan (available on the Tahmoor Coal website), which has been prepared to address the requirements of Condition B7 of the SSD 8445 development consent for Tahmoor South.

13.2.1.1 Water Quality

Tahmoor Coal is licensed to discharge water from two (2) Licenced Discharge Point (LDP) sites, LDP1 located on pit top and LDP16 located on the S4 Dam located at the REA. Allowable overflow from four (4) Licenced Overflow Points (LOPs) during periods of wet weather (as per EPL 1389, which refers to more than 10 mm of rainfall within a 24 hour period at the premises). The location of the LDPs and LOPs are described in **Table 13-3** below and shown in **Appendix 2.** A schematic of the surface water system is displayed in **Appendix 4.**

Table 13-3 Licensed Discharge and Overflow Points Locations

Point	Location
LDP 1	Discharge from Pit top Dam M4 and Water Treatment Plant
LDP 16	Discharge from REA Dam S4
LOP 3	Overflow from REA Dam S9
LOP 4	Overflow from REA Dam S4
LOP 5	Overflow from REA Dam S8
LOP 6	Overflow from Shaft Site 2 Dam M6

13.2.1.2 Water Discharge

On average Tahmoor Mine discharged 4288 kL/day, with a total of 1,564,971 kL or approximately 1,564 ML discharged during the reporting period. This is shown in **Table 13-4, Figure 13-5** and **Figure 13-6.** The peak shown in **Figure 13-6** on the 22 May 2025 was as a result of a high rainfall event and corresponds to the peak in **Figure 13-7** for the total daily rainfall recorded at the Camden Airport Weather Station. During this data analysis of this discharge event an error has been discovered during the period of May to August 2025 whereby the rainfall amounts recorded by the Stockpile Weather Station may possibly have been erroneous and under recording the total rainfall received on site during this period. Therefore, the Camden Airport Weather Station has been used to substitute this data period. The discharge through LDP1 correlates with the rainfall amount received in the area during this event. This discharge event has been in accordance with EPL 1389 (more than 10 mm rainfall received within 24 hrs). Refer to **Figure 13-7** for comparison between the Stockpile Weather Station and the Camden Airport Weather station during 2025.

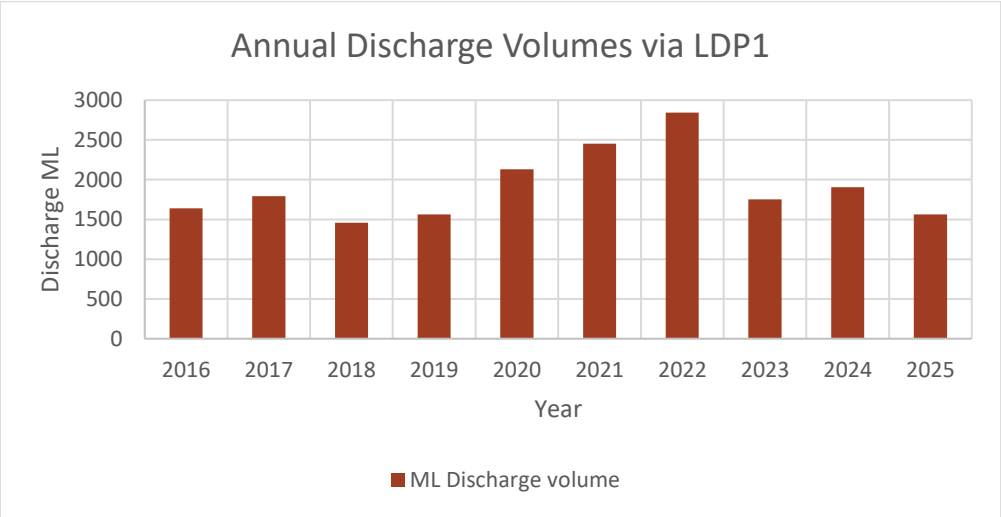


Figure 13-5 Volume (ML) of Discharge from LDP1 for the past 10 years.

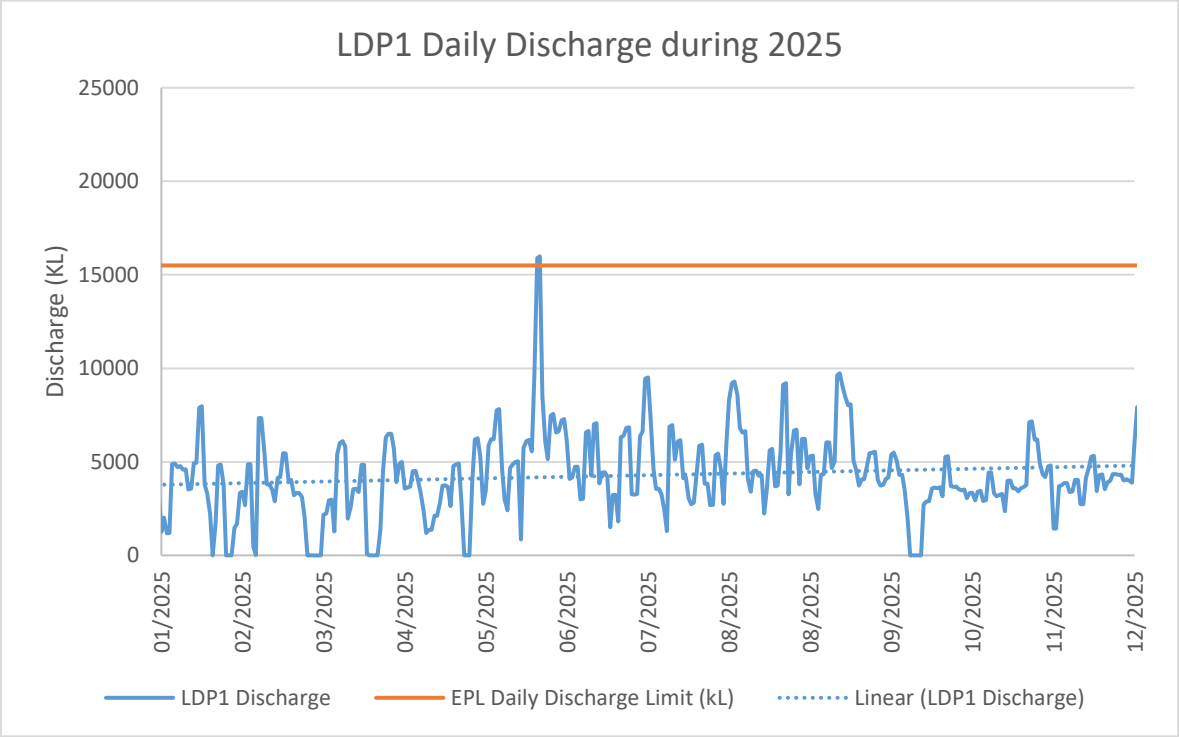


Figure 13-6 Daily Discharge (kL) via LDP1

*The spike recorded in May was attributed to a high rainfall event (refer to **Figure 13-7** below and **Table 13-4** for further details). This is in accordance with EPL 1389 which allows daily discharge over the prescribed limit when more than 10 mm of rainfall is recorded in 24 hours.

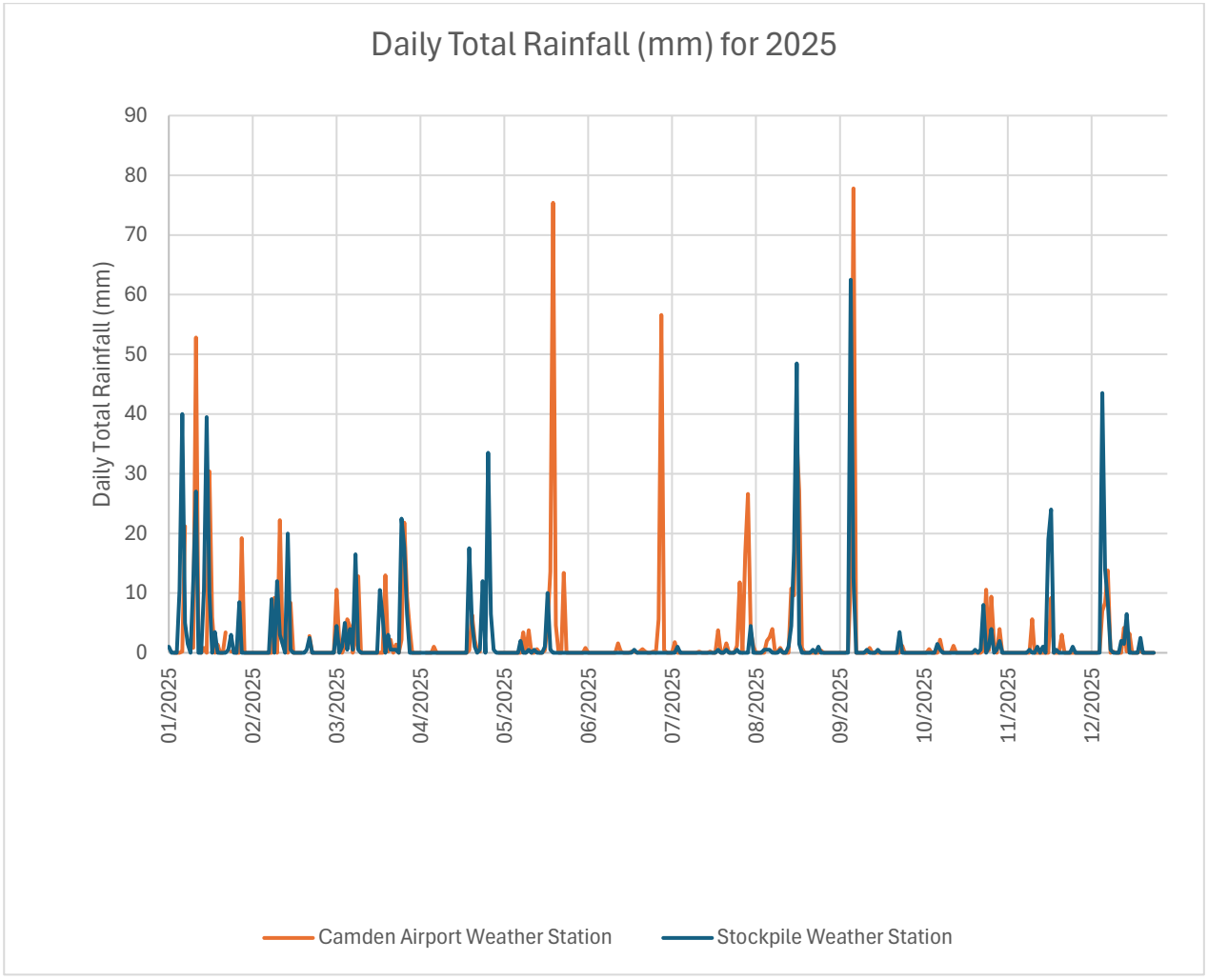


Figure 13-7 Daily total rainfall from Stockpile weather station

Table 13-4 Daily Discharge (KL) via Licence Discharge Point 1 (LDP1).

Day	Jan (kL)	Feb (kL)	Mar (kL)	Apr (kL)	May (kL)	Jun (kL)	Jul (kL)	Aug (kL)	Sep (kL)	Oct (kL)	Nov (kL)	Dec (kL)	EPL Daily Discharge Limit
1	3450	3341	0	4891	5282	7290	9450	8295	5343	5490	3405	3698	15500
2	3430	3395	0	4986	2756	6161	9517	9198	3282	5052	3453	3737	15500
3	1260	2683	0	3569	3429	4092	7357	9296	2486	4302	2904	3858	15500
4	2020	4871	2179	3620	5881	4155	4637	8612	4314	4306	2953	3860	15500
5	1180	4875	2233	3674	6203	4735	3548	6804	4341	3477	4431	3383	15500
6	1200	467	2948	4506	6207	4739	3562	6574	6033	1971	4436	3427	15500
7	4866	17	2977	4507	7749	2993	3262	6639	6035	0	3316	4030	15500
8	4910	7331	1286	3971	7821	3025	2407	4090	4677	0	3165	4033	15500
9	4718	7332	5405	3314	4628	6575	1296	3402	5007	0	3229	2729	15500
10	4768	5615	6005	2369	2985	6657	6878	4491	9626	0	3281	2731	15500
11	4578	3797	6108	1190	2416	4262	6965	4536	9736	0	2352	4132	15500
12	4601	3798	5827	1360	4676	7022	5122	4259	9014	2720	3980	4611	15500
13	3527	3500	1970	1367	4871	7057	6087	4300	8484	2882	4004	5289	15500
14	3580	2890	2567	2114	4991	3856	6153	2241	8024	2882	3583	5313	15500
15	4924	4135	3548	2118	5025	4410	4120	3494	8070	3579	3597	3434	15500
16	4940	4189	3549	2817	849	4448	4190	5619	5059	3623	3414	4289	15500
17	7884	5462	3392	3733	5742	4207	3045	5698	4576	3591	3583	4325	15500
18	7981	5462	4839	3737	6099	1496	2734	3694	3730	3637	3663	3535	15500
19	3776	3991	4839	3653	6179	3229	2829	3734	4055	3163	3762	3923	15500
20	3297	4043	70	2632	5558	3239	4416	5490	4063	5264	7115	3986	15500
21	2204	3219	0	4776	9635	1819	5850	9110	4779	5309	7168	4347	15500
22	0	3336	0	4851	15889	6314	5923	9212	5456	3711	6185	4349	15500
23	1698	3337	0	4901	15987	6406	3827	3269	5499	3663	6189	4302	15500
24	4800	3110	0	2881	8524	6805	3831	5481	5546	3669	4927	4310	15500
25	4855	2076	1386	0	6064	6842	2680	6669	4022	3539	4324	4004	15500
26	3815	0	4489	0	5141	3267	2703	6719	3727	3479	4198	4064	15500
27	1	0	6307	0	7479	3241	5361	3789	3777	3527	4750	4004	15500
28	0	0	6503	3973	7558	3279	5443	6218	4080	3057	4799	3881	15500
29	0		6504	6184	6564	6371	4563	6221	4172	3332	1433	6067	15500
30	1464		5705	6267	6640	6622	2753	4644	5396	3344	1434	7916	15500
31	1694		3914		7211		6020	5294		2948		7969	15500
MIN	0	0	0	0	848.6	1496	1296	2241	2486	0	1433	2728.9	0
MAX	7981	7332	6504	6267	15987	7290	9517	9296	9736	5490.1	7168	7969.1	15987
AVERAGE	3272	3438	3050	3265	6324	4820	4727	5713	5414	3081	3968	4308	4288

The highlighted cells indicate an exceedance due to a high rainfall event with more than 10 mm of rainfall recorded at the Camden Airport Weather Station. This is in accordance EPL 1389 which allows daily discharge over the prescribed limit when more than 10 mm of rainfall is recorded in 24 hours at the premises.

13.2.2 Environmental Performance

13.2.2.1 Water Quality

Mine inflow water is pumped to the surface and directed to a series of mine pit-top treatment dams, which also captures storm water from the site. This combined water is settled through a network of dams across site and is then discharged via an approved Licence Discharge Point into Teatree Hollow Creek which flows into the Bargo River.

The site's main Licence Discharge Point (LDP1), LDP16 (when in operation) and multiple overflow points (refer **Appendix 2**) are sampled and tested monthly and as required by a third-party contractor in accordance with Environmental Protection Licence (EPL) 1389 conditions and EPA *Approved methods for sampling and analysis of water pollutants in NSW*. Water samples from the Bargo River are also taken monthly at an upstream location, downstream location and at the confluence of Teatree Hollow Creek and Bargo River. A schematic of the Tahmoor Mine water management system and water quality infrastructure is outlined within **Appendix 4**. This schematic diagram details main water sources and their flow paths across the mine site and eventual discharge via LDP1.

EPL 1389 states maximum discharge limits for analytes discharged via LDP1. These results are provided in **Table 13-5** for the reporting period. The water quality trend for LDP1 is outlined in **Appendix 5** and shows improvement in results this reporting period due to the operation of the new Water Treatment Plant onsite processing waters received from Underground workings. There have been no non-compliances or exceedances of limits set by the EPL during the reporting period.

During 2020, the installation of a real-time turbidity monitor was completed and has continued to form an integral part of the water management system on site. The additional use of flocculent mixed into the discharge dam series (Dams M1-M4) via a dosing pump allows controlled dosing depending on the turbidity readings received from the real-time monitor and visual inspections.

In accordance with EPL 1389, a new Water Treatment Plant was constructed and commissioned, and has improved water quality for mine discharge waters. Please see **Table 13-5** for water quality results for the reporting period.

Table 13-5 LDP1 Discharge Water Quality

	pH	Electrical Conductivity	Total Suspended Solids (TSS)	Turbidity	Enterococci	Total Nitrogen	Aluminium	Arsenic	Barium	Copper	Nickel	Zinc
	pH Unit	µS/cm	mg/L	NTU	CFU/100ml	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
100th Percentile Concentration Limits	6.5-9	2,600	30	150	1700	8	110	200	6440	5	200	300
Jan-2025	7.4	93	<5	0.9	75	0.1	<10	<1	141	<1	<1	35
Feb-2025	7.5	174	<5	0.5	14	0.4	<10	1	32	<1	<1	<5
Mar-2025	8.3	711	<5	4.5	250	1.1	10	26	1390	<1	25	<5
Apr-2025	8.4	232	<5	0.3	5	0.4	<10	3	202	<1	<1	26
May-2025	8.5	1060	<5	0.7	16	0.9	10	49	2950	2	32	32
Jun-2025	8.4	789	<5	1.8	21	1.1	<10	20	1970	1	18	48
Jul-2025	8.1	1060	10	8.8	180	2.7	<10	15	2300	1	20	44
Aug-2025	7.6	175	<5	0.4	2	0.2	10	4	161	5	3	48
Sep-2025	8.1	666	<5	5.8	9	0.8	<10	18	1590	<1	13	34
Oct-2025	7.3	155	<5	0.6	3	0.1	<10	1	179	<1	<1	35
Nov-2025	8.5	1020	<5	0.8	66	0.5	<10	22	1430	<1	19	23
Dec-2025	7.8	543	<5	0.3	65	0.7	<10	14	679	<1	6	51

13.2.2.2 Potable Water Supply

Sydney Water potable water is utilised across Tahmoor Mine with applications in amenities across pit-top facilities and sent underground for mining applications. Emphasis is placed on utilising recycled water and seeking to reduce Sydney Water potable water use on site where possible. The average monthly potable water usage for 2025 was 13 ML/month. This decrease coincides with the ceasing of mining activities during December 2024. In comparison 2024 was 41ML/month, 2023 was 42 ML/month and similar to the previous reporting periods for 2022 being 38ML/month and 2021 being 43 ML/month.

13.2.2.3 Recycled Water Treatment Plant

Tahmoor Coal historically recycled mine water from the sealed longwall goafs to the south of the No.3 Shaft for reuse in the mine operations underground and various surface facilities.

Due to issues with water extraction to supply the Recycled Water Treatment Plant, recycling of water for use at the site had ceased during 2023 (refer to **Table 13-6** below). However further investigations are underway for re-use of waters from the new Water Treatment Plant that was constructed during last reporting period.

Table 13-6 Recycled and Potable Water Use

Water usage	2018	2019	2020	2021	2022	2023	2024	2025
Potable Water usage (kL)	133 389	414 115	396 435	525 301	449 600	508 773	502 237	156 212
Recycled Water usage (kL)	388 449	291 372	186 584	65 259*	48*	0	0	0
ROM tonnes	2 110 328	2 388 854	2 354 901	2 747 965	2 324 202	2 733 692	2 998 583	0
Potable Water Intensity (L/ROM tonne)	63	173	168	191	193	186	167	0

*Reduction in water usage water usage for the reporting period is attributed to the cessation of mining activities during 2025.

13.2.2.4 Water Storage Volumes

Data regarding stored water volume in site dams is provided within **Appendix 3.**

Tahmoor Coal does not participate in any salinity trading scheme and therefore is not required to report on controlled discharge water.

13.2.3 Further Improvements

Through the operation of the Water Treatment Plant (which uses Reverse Osmosis technology), improvements to the discharge water quality through LDP1 has improved during the reporting period. These results can be observed via the Water Quality results in **Table 13-5** above. Improvements to the brine line discharge line are in development for 2026 and outcomes will be reported during the next reporting period.

14 Rehabilitation

Rehabilitation across Tahmoor Mine is managed in accordance with two key documents: the approved Rehabilitation Management Plan, which addresses the requirements of the Resources Regulator; and the Rehabilitation Strategy, which has been prepared to address Condition B7 of the Tahmoor South Development Consent (SSD 8445). Both documents are available on the Tahmoor Coal website.

The refuse emplacement footprint will remain within the currently approved extent, with the allowable height of the Refuse Emplacement Area (REA) increasing to 320 RL. This has required the removal of previously rehabilitated upper sections to facilitate the placement of additional refuse material at a higher elevation. Once refuse emplacement is complete, the affected areas will be capped with topsoil and rehabilitated in accordance with the approved Rehabilitation Management Plan and Rehabilitation Strategy.

14.1 Environmental Performance

A summary of rehabilitation activities at Tahmoor Mine is provided in **Table 14-1** and **Figure 14-1** below. Rehabilitation works completed during 2024 included supplementary planting of hiko cells and/or tubestock within Rehabilitation Stage 5 of the REA. Some plant losses occurred due to herbivory; however, many of the planted cells continue to establish and mature, contributing to the revegetation of previously bare areas.

No rehabilitation works were completed during 2025, as no areas were ready for rehabilitation. Similarly, no rehabilitation works are forecast for the next reporting period (2026).

Table 14-1 Rehabilitation Summary

Mine Area Type	Previous Reporting Period (Actual)	This Reporting Period (Actual)	Next Reporting Period (Forecast)
	2024	2025	2026
A. Total mine footprint (ha)	142.5	142.5	142.5
B. Total active disturbance (ha)	70.2	70.2	70.2
C. Land being prepared for rehabilitation (ha)	0	0	0
D. Land under active rehabilitation (ha) (Total rehabbed to date)	72.3	72.3	72.3
E. Completed Rehabilitation (ha)	**0**	**0**	**0**

Annual rehabilitation monitoring was conducted by the Tahmoor Coal Environmental Specialist during December 2025. During late 2019, bushfires affected the area including rehabilitation Stages 6 and 9 and adjoining bushland containing the permanent reference sites and plots. During the 2025 Annual Rehabilitation Walkover, growth and regeneration of vegetation has continued to recover throughout the rehabilitation areas that were affected.

During the reporting period, weed management has been effective at controlling Andropogon virginicus (Whisky Grass) and Eragrostis curvula (African lovegrass). Weed cover in general across the rehabilitated stages has been low with continued weed control providing good ongoing results for 2025. Continued regular weed maintenance activities will be undertaken next reporting period to maintain control over rehabilitated areas and prevent any weed incursion into adjoining bushland areas.

Generally, no major changes in the vegetation quality and structure other than expected growth has occurred during the reporting period. Rainfall for 2025 was 720mm for the year, this has decreased from 944mm received during last reporting period in 2024 measured at the Tahmoor Coal Coking Stockpile Weather Station.

Revegetation across the REA was highly variable with some sections approximately 31 years old and others newly established with seeding carried out 36 months prior to monitoring. The native species included in the revegetation mix also varies, in both diversity and structural representation, between those areas revegetated prior to 2006 and those revegetated more recently.

14.1.1 Rehabilitation Stages Monitoring Results

Characteristics of sections revegetated prior to 2006 include (Stages 1-5, 6 & 9):

- Canopy species including Eucalyptus species, Angophora species and Allocasuarina littoralis (Black She-oak) providing canopy cover ranging from good to limited, heights up to 10 m and exhibiting good growth. Second generation A. littoralis were common near mature plants, with other canopy species second generation plants beginning to appear.
- Smaller tree species including Acacia decurrens (Black Wattle) and Acacia binervia (Coast Myall) were also regenerating with second generation individuals present.
- A midstorey that varied from dense stands of Kunzea ambigua (Tick Bush) or the non-local species Leptospermum laevigatum (Coast Teatree) to scattered Acacia species interspersed with other less abundant native species.
- Highly effective weed control actions reduced weed cover where extensive stands of the weed Andropogon virginicus (Whiskey Grass) and smaller populations of Eragrostis curvula (African Lovegrass) were present and excluded all other species. Weed cover was generally low with weed control providing good on-going results.
- Increasing colonisation by native grasses with cover increasing annually in most areas, including where exotic grasses have been controlled.
- Vegetation was dominated by Acacia species, many of which are senescent or in some sections mixed native vegetation that is not representative of the local native plant communities. Senescent Acacias becoming less common.
- Good species diversity including target species of nearby remnant vegetation; however, many species had a low abundance.
- All species exhibited signs of good reproduction potential including the threatened species, Persoonia bargoensis and Grevillea parviflora subsp. parviflora (Small-flower Grevillea).

Characteristics of sections revegetated in 2007 (Stage 8):

- originally planted with pasture species as a stabiliser, and was still dominated by exotic grasses in 2016;
- trial of reseeding using the soil amelioration product OGM proved not suitable for the REA;
- very limited cover by native species, both target and non-target;

- scattered patches of native grasses with good cover prior to 2017;
- revegetation and rehabilitation measures were ceased in 2023 with area stripped and re-emplaced;
- Stage was re-capped with topsoil and seeded in September 2023; and
- Rehabilitation continues to contain limited germination of native seed.

Characteristics of sections revegetated post 2010 (Stages 12a, 14 & 16 and No.2 Shaft 11KV Power corridor) are:

- generally good germination rates on level areas with species from all strata represented;
- germination more variable on slopes but still adequate;
- growth rates moderate to very good; and
- limited weed populations.

14.1.2 Erosion Controls:

Erosion control structures, which were implemented in 2019, remain in good condition and no major erosion was recorded along the slopes of the REA. An area in Stage 1, where seepage affected vegetation growth, was rehabilitated with the ripping of the soil surface and mulching in 2018. This area continues to be in good condition with strong growth from the Callistemon sp. and with no seepage evident in 2025. Nearby the seepage area, minor erosion has also been recorded, this is shown on the boundary of Stage 1 and Stage 5 in Figure 2 below. Erosion has remained in Stage 9 on an access road from the Haul Road and in two (2) areas in Stage 17 with slight increase in erosion over the past 12 months (see Figure 2).

This should continue to be monitored, and minor works required to rectify the erosional areas identified.

14.1.3 Grass Trials:

Monitoring of grass trials was undertaken as part of the 2025 works. The fencing around most of the grass trials has been damaged by wildlife and will need to be remediated.

During 2025, weed coverage has remained low in Trial H and still remains the highest in grass cover when compared with all the other trials across the REA. Trial E and F had the least grass coverage however good diversity in emerging seedling species. Trials B and C had good grass coverage with less species diversity. Low weed presence was noted for all trials during 2025 inspections. Trial A had sparse grass coverage with casuarina sp. development progressing from seedlings to saplings with strong growth indicators.

14.1.4 Reference Plots:

The reference plots and permanent monitoring plots were not monitored for 2025.

14.1.5 Rehabilitation Performance

The Rehabilitation Improvement Plan TARP includes a classification status of each assessed area forming the basis for the TARP for each stage showed in **Table 14-2** and **Table 14-3**. This is used in the Annual Rehabilitation walkover to categorise the successfulness of the rehabilitation in **Appendix 7**. During 2023, Stages 7, 8 and 10 were re-utilised for refuse emplacement within the

approved REA profile. These stages have been excluded from the Rehabilitation Walkover Assessment since 2024. Stage 8 was rehabilitated during 2023 and will be incorporated into the next reporting period walkover assessment. All stages have maintained their status rating from 2024 results. (see **Figure 14-1** for location of stages).

Table 14-2 TARP Classification

Annual Rehabilitation Status	Description	Action
VC	Generally, exceeds the good practice standards and regulatory requirements by a significant margin.	No further action. Continue to maintenance activities as scheduled.
C	Generally good practice standards and regulatory requirements subject to normal variance.	No further action. Continue to maintenance activities as scheduled.
NC1	Not complying with some regulatory requirements and improvement needed to meet required good practice standards. Required works minor in nature and generally within budgeted site program.	Undertake minor works to improve rehabilitation to minimum standard prior to next annual inspection.
NC2	Not complying with significant risk to this inspection item, urgent corrective action needed. Requirements generally substantial in nature and beyond a budgeted site program.	Undertake major works required to improve rehabilitation to minimum standard prior to next annual inspection.

Table 14-3 TARP Rehabilitation Performance

Area	Status Rating	Comments/Opportunity for improvement
Stage 1-2	**C**	Minor gully erosion to be improved, continued weed control.
Stage 3-5	**C**	Continued weed control
Stage 6 & 9	**C**	Continued weed control
Stage 7	**N/A**	Current emplacement area.
Stage 8	**No Status**	Rehabilitation in still establishing (less than 3 yrs)
Stage 10	**N/A**	Current emplacement area.
Stage 12a	**C**	Opportunity for additional plantings in bare patches
Stages 14-16	**C**	Continued weed control
Stage 17	**No Status**	Rehabilitation in still establishing (less than 3 yrs)

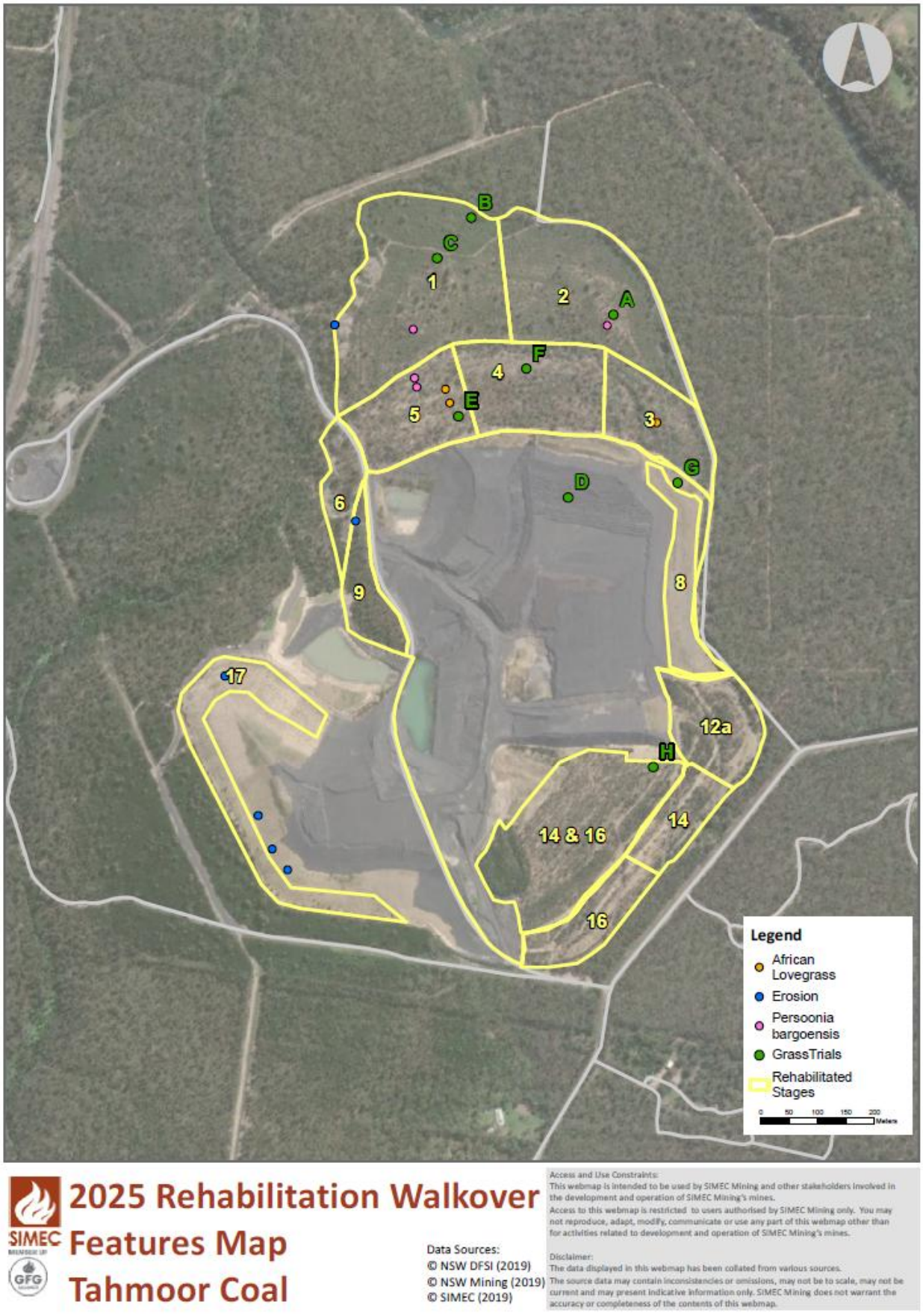


Figure 14-1 Rehabilitation Stages and features noted during the Annual Rehabilitation Walkover during 2025.

14.1.6 Rehabilitation and Emplacement Areas

During 2023, a portion of the top section of the current Refuse Emplacement Area was stripped to allow additional drying area and emplacement of refuse material. This has allowed for further vertical emplacement which will negate the need for future disturbance outside the already approved REA profile in accordance with the Tahmoor South Consent SSD 8445 and supporting EIS.

In accordance with Development Consent SSD 8445, Tahmoor Coal formally retired 327 x PCT1081 Biobanking Credits and received confirmation from the Biobanking Information Management System on 27 April 2023 (Transaction number 202304-RT-850) as per the requirements of the NSW Biodiversity Offset Scheme prior to any clearing of the PCT1081.

Mining activities were suspended following the completion of Longwall S3A on the 17 December 2024. For the reporting period 63 203 tonnes of refuse was emplaced within the active emplacement areas. The emplacement areas utilised during the reporting period were confined to the adjoining 'valley' section, the area located east of Dam S7 and the top-central section of the REA. Future emplacement of refuse material for 2026 will be confined to the same areas. (Refer to **Figure 14-2**).

Limited opportunities are available for rehabilitation works during the next reporting period, however additional inter-planting will be considered for improvement in species diversity and abundance in establishing stages.

Tahmoor Coal is continuing to conduct a monthly grab water sample upstream and downstream of the Bargo River, as well as the EPA Licenced Discharge Point 1(LDP1) at Pit top and Licenced Overflow Points (LOP's) of dams located within the REA and at Shaft Site 2.

14.1.7 Further Improvements

During the next reporting period, weed maintenance control will continue across all stages of the REA. Identified areas of erosion will be remediated with coir logs etc to prevent further erosion from occurring and will be assessed during the next walkover assessment.

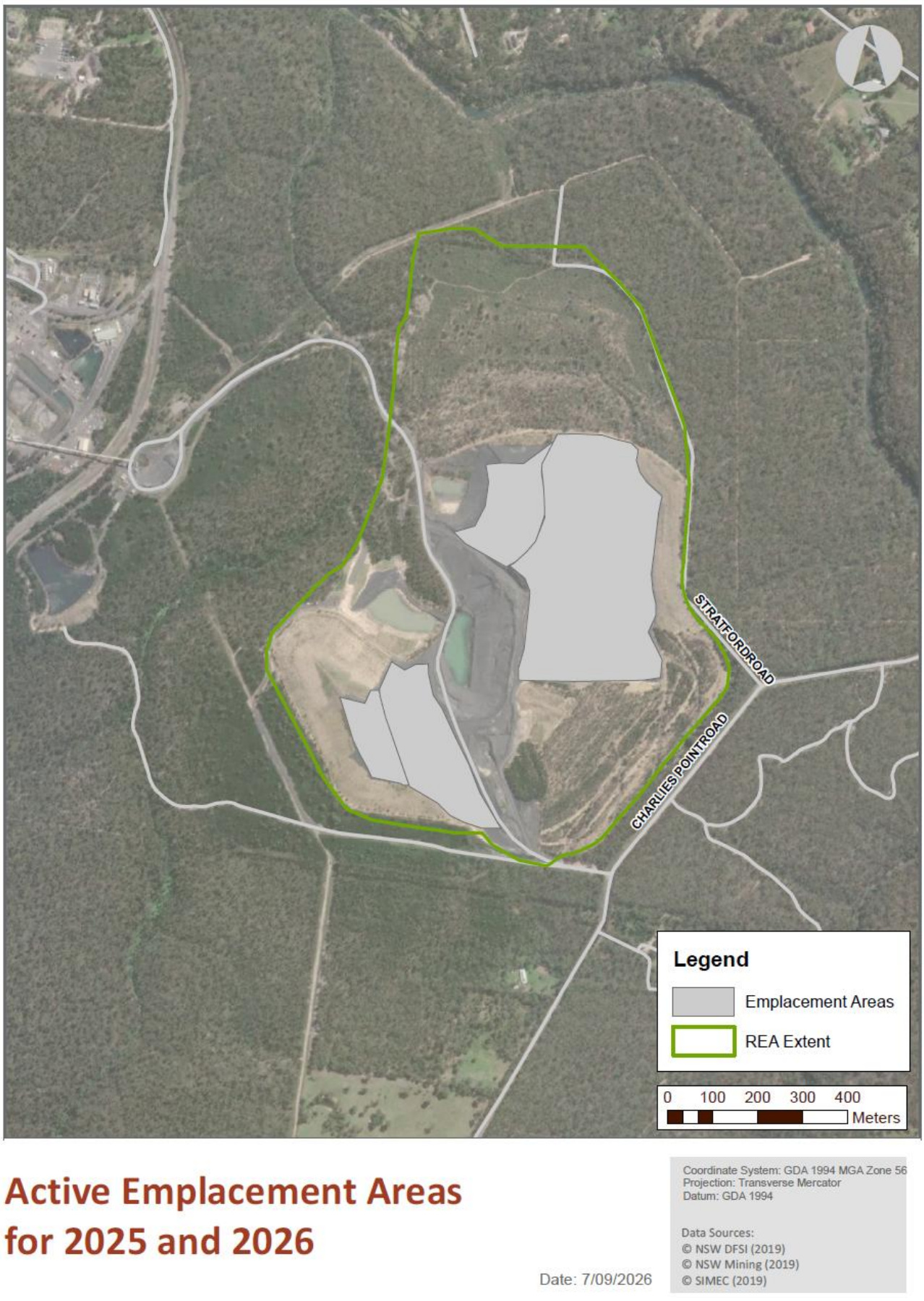


Figure 14-2 Emplacement Areas for 2025 and 2026.

14.2 Actions for the Next Reporting Period

There have been no new areas identified as completed during 2025 to be rehabilitated in the next reporting period. Rehabilitation targets for the next reporting period (1 January 2026 – 31 December 2026) are outlined in **Table 14-4** below.

Table 14-4 Rehabilitation Targets for 2026

Category	Targets for 2026 (ha)				
	Q1	Q2	Q3	Q4	Total (Target)
Disturbed	0	0	0	0	0
Levelled/Re-contoured	0	0	0	0	0
Rehabilitation Seeding	0	0	0	0	0
Established	0	0	0	0	0

A summary of maintenance activities completed and proposed for all rehabilitated land is outlined within **Table 14-5 below**.

Table 14-5 Rehabilitation Maintenance Activities

Nature of Treatment	Area (Ha) this Reporting period (2025)	Area (Ha) next reporting period (2026)	Comments, Control Strategies, Treatment Detail
Additional erosion control (drains re-contouring, rock protection)	<1	<1	Routine improvements and maintenance to existing stormwater drainage systems and erosion/sediment controls on disturbed areas and around dams will continue to be undertaken as required. Some erosional areas noted in the 2025 walkover assessment to be remiduated.
Re-covering (detail – further topsoil, subsoil sealing, etc)	0	0	
Soil treatment (detail – fertiliser, lime, gypsum, etc)	0	0	
Treatment management (detail – grazing, cropping, slashing, weeding etc)	<1	<1	Targeted weed spraying undertaken throughout the REA with weeds identified in the 2025 Rehab Walkover assessment prioritised. Similar weed management activities projected for 2026.
Adversely affected by weeds (detail, type and treatment)	<1	<1	Weed spraying continued on a monthly regime during 2025, with some Acacia saligna and weeds noted during the 2025 walkover assessment. Minor weed species will need continued control during 2026, including Eragrostis curvula in Stages 14, 16, 12 and identified on the western side of Stages 1 & 5.

Re-seeding/planting (detail – species density, season, etc)	0	0	
Feral animal control (detail – additional fencing, trapping, baiting, etc)	80	80	Continued baiting of rabbits for next reporting period.

14.3 Mine Closure

14.3.1 Post mining Land use

There are several post mining land use options that may be applicable for the Tahmoor Mine site including residential land use, industrial land use or a return to native bushland.

The likely final land use option for most of Tahmoor Coal's closure domains will be a return to native bushland (refer to **Figure 14.3**). However, the final land use options will be confirmed in the detailed closure planning process, which involves undertaking a final land use analysis required 5 years prior to the cessation of mining activities at Tahmoor Mine.

A mine closure plan was developed as part of the Environmental Impact Statement for the Tahmoor South Project, referred to as the Rehabilitation and Mine Closure Strategy (SLR,2020).

14.3.2 Rehabilitation Indicators

The REA key rehabilitation indicators include the following:

- Maximum height of RL320 (SSD 8445);
- Maximum slope on final landform external batters will be 1:4 (generally will be 1:8);
- External batters should have gently sloping contour drains, reporting to water storage dams;
- Topsoil placement depth >300 mm;
- All final landform slopes to be contour ploughed prior to seeding or planting;
- Target <10% weed infestation within monitoring transects;
- Target evidence of second-generation flora germination in monitoring transects (monitored annually); and
- Rehabilitation monitoring transects contain flora species and structural characteristics like the desired vegetation communities at the analogue/reference sites (monitored annually).

Soils located at Tahmoor Mine have been identified as part of the Lucas Heights Soil Landscape and occurring adjacent to the Gymea Soil Landscape. Soil limitations of the landscape include stoniness, hard setting surfaces and low soil fertility. Erosion on the landscape is generally low. Where possible, deeper soil horizons are reserved for subsoil and capping material, while the top soil horizons with the highest organic content are reserved for rehabilitation and direct seeding/planting applications.

A combination of sterile cover crops and grasses for initial stability while native shrub and tree seed mixes establish are used at the REA to achieve the rehabilitation objective outcome of surrounding native bushland in the area. A species list has been developed and refined based on Tahmoor Coal's development consents and the results of the annual rehabilitation monitoring (which identifies which species have performed more successful than others during each year).

Hollow bearing trees and timber logs from clearing activities at the REA are salvaged and stockpiled for use throughout rehabilitation areas. Logs and hollows are spread throughout rehabilitation areas where accessible, to provide structure and encourage habitation colonisation by native fauna.

All mine closure domains including active domains still in operational use, are described in the Tahmoor Mine Conceptual Mine Closure Plan, the Rehabilitation Management Plan and Rehabilitation Strategy. To date the Refuse Emplacement Area is the only Domain currently undergoing active rehabilitation activities.

Regular surveying is conducted in active landform areas to monitor maximum slope and height to conform to final landform designs.

Tahmoor Coal has five (5) identified primary closure domains based on operational function and geography (ie. 1, 2, 3, 4 and 5). Most of these domains are connected or within close proximity of one another and will therefore share similar final landforms and rehabilitation objectives. A schedule of these domains, with the rehabilitation status comparing last reporting period to this reporting period, is provided in **Table 14-6.**

Table 14-6 Tahmoor Coal Closure Domains

Domain	Description	Rehabilitation Status	
		2024	**2025**
1	Tahmoor Mine Main Pit-top Area	-	-
1A	CHPP	Active Area	Active Area
1B	Rail Loading Facility	Active Area	Active Area
1C	Main Workshop and Administration Area	Active Area	Active Area
1D	No.3 Shaft and Gas Drainage Plant	Active Area	Active Area
1E	Sewage/Water Treatment Plant	Active Area	Active Area
2	Product Stockpile Area	Active Area	Active Area
3	Refuse Emplacement Area	Active Area, Ecosystem Est., and Ecosystem Dev.	Active Area, Ecosystem Est., and Ecosystem Dev.
4	No.1 Ventilation Shaft	Active Area	Active Area
5	No.2 Ventilation Shaft	Active Area	Active Area
6	Off Title Subsidence Area	Active Area	Active Area

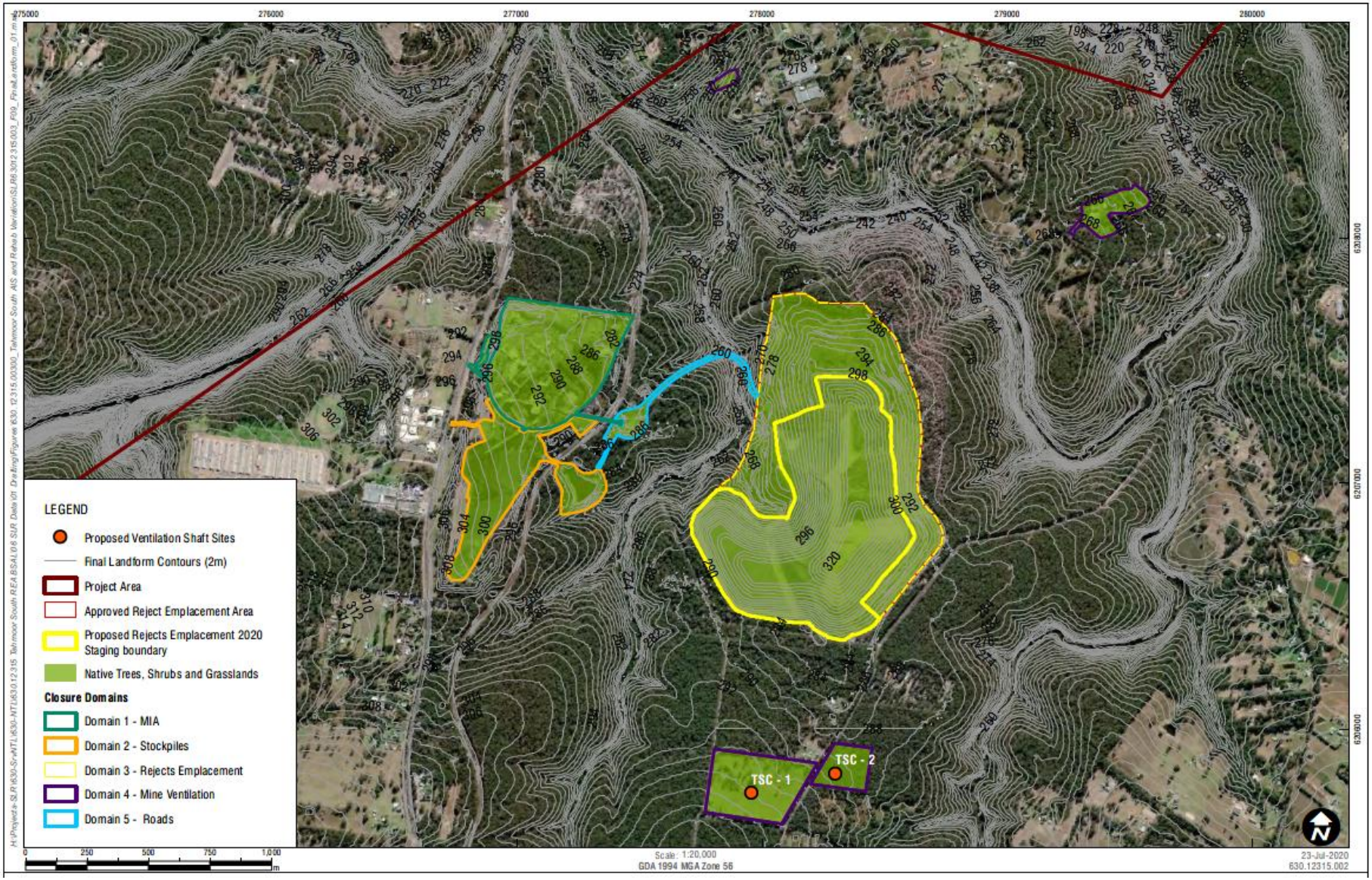


Figure 14-3 Final rehabilitation and post-mining land use and contours.

15 Weeds

15.1 Environmental Management

Weeds are managed across Tahmoor Mine in accordance with the Weed Management Procedure which has been developed as part of the site Environmental Management System. The purpose of this plan is to outline management strategies and controls for noxious and environmental weeds, so that weed infestations are controlled and kept at an acceptable level on all lands owned or managed by the mine. A summary of weed species targeted during the reporting period, and control methods used, is provided in **Table 15-1.**

Table 15-1 Weed Target Species

Target Weed Species	Date of Control	Treatment Method
African Lovegrass (Eragrostis curvula)	All seasons	Herbicide (Glyphosate)
Hedge Mustard (Sisymbrium orientale)	All seasons	Herbicide (Glyphosate Dicamba)
Whiskey Grass (Andropogon virginicus)	All seasons	Herbicide (Glyphosate)
Serrated Tussock (Nassella trichotoma)	All seasons	Herbicide (Glyphosate)
Fireweed (Senecio riensis madagasca)	Winter or as detected	Hand Weeding & Herbicide (Glysophate) Late Autumn
Western Australian Golden Wattle (Acacia saligna)	All seasons	Cut stump removal and herbicide application
Couch (Cynodon dactylon)	All seasons	Herbicide (Glyphosate)
Fountain Grass (Cenchrus setaceus)	All seasons	Herbicide (Glyphosate)
Catsear (Hypochaeris radicata)	All seasons	Herbicide (Glyphosate)
Narrow-leafed Cotton Bush (Gomphocarpus fruticosus)	All seasons	Herbicide (Glyphosate Dicamba)
Flaxleaf Fleabane (Conyza bonariensis)	All seasons	Herbicide (Glyphosate resistant)
Scarlet Pimpernel (Anagallis arvensis)	All seasons	Herbicide (Glyphosate Dicamba)
Veined Verbena (Verbena rigida)	All seasons	Herbicide (Glyphosate Dicamba)
Paspalum (Paspalum dilatatum)	All seasons	Herbicide (Glyphosate)
Red-flowered Mallow (Modiola caroliniana)	All seasons	Hand weeding & Herbicide (Glyphosate)
Pampas Grass	All seasons	Herbicide (Glyphosate)
Plantain (Plantago)	All seasons	Herbicide (Glyphosate)

15.2 Environmental Performance

Weed management of all land owned or managed by Tahmoor Coal has continued through the reporting period. Monthly Environmental inspections across pit top, REA, Shaft site 1, Shaft site 2 and the Bargo shaft site continually monitor weed prevalence across these sites and target areas of

concern to be controlled within the next month by Tahmoor Coal's Grounds Maintenance Contractors.

No further Pampas grass has been noted on pit top and monitoring will continue throughout the next reporting period for any re-emergence.

Continuation of the current weed control program and control of Whiskey Grass, African Lovegrass, Hedge Mustard, *Acacia saligna* and seedling *Leptospermum laevigatum* has been recommended and is monitored monthly by Tahmoor Coal's Grounds Maintenance Contractor.

Weeds identified across site during the Monthly Environmental Inspections during 2025 include African lovegrass, Blackberry (in particular at Dam M4), Narrow-leafed cotton bush and flaxleaf fleabane as most identified across pit-top. This was managed and maintained monthly by Tahmoor Coal's Grounds Maintenance Contractor, however, continued weed control is needed for some areas during the next reporting period.

There were no reportable incidents related to weed management during the reporting period.

15.3 Further Improvements

Tahmoor Coal will continue weed management monitoring and maintenance activities within associated leased and owned land, across pit top and rehabilitation areas at the REA, with particular focus on any problematic weed pockets identified in the Annual Rehabilitation walkover or during the Monthly Environmental Inspections.

16 Bushfire Management

16.1 Environmental Management

Bushfire management is maintained across Tahmoor Mine in accordance with the approved Bushfire Management Plan (BMP), which was prepared to address the requirements of Condition B7 of the SSD 8445 development consent for Tahmoor South.

The BMP provides significant detail on the location of all Tahmoor Coal land holdings with detailed maps showing Asset Protection Zones (APZ), Land Management Zones (LMZ) and Strategic Fire Zones (SFZ), gate/track/road access for all locations, and a detailed schedule of hazard reduction activities required for each location. For further information the Bushfire Management Plan can be viewed on the Tahmoor coal's website.

16.2 Environmental Performance

During 2025, Tahmoor Coal was unable to undertake Annual Asset Protection Zone maintenance due to financial constraints, however APZ zones remained in good accessible condition during the reporting period. This includes light vehicle access roads and perimeters around pit top, REA access roads, Shaft site 1, Shaft site 2 and Tahmoor Coal owned neighbouring properties on Charlies Point Road south of the REA maintained (refer to **Figure 16-1**).

No hazard reduction burns were completed during the reporting period, and no wildfires were reported in the region.

16.3 Further Improvements

Tahmoor Coal will continue to implement hazard control strategies outlined in the current Bushfire Management Plan and in consultation with the Wollondilly/Wingecarribee Bush Fire Management Committee which a Tahmoor Coal representative attends quarterly.

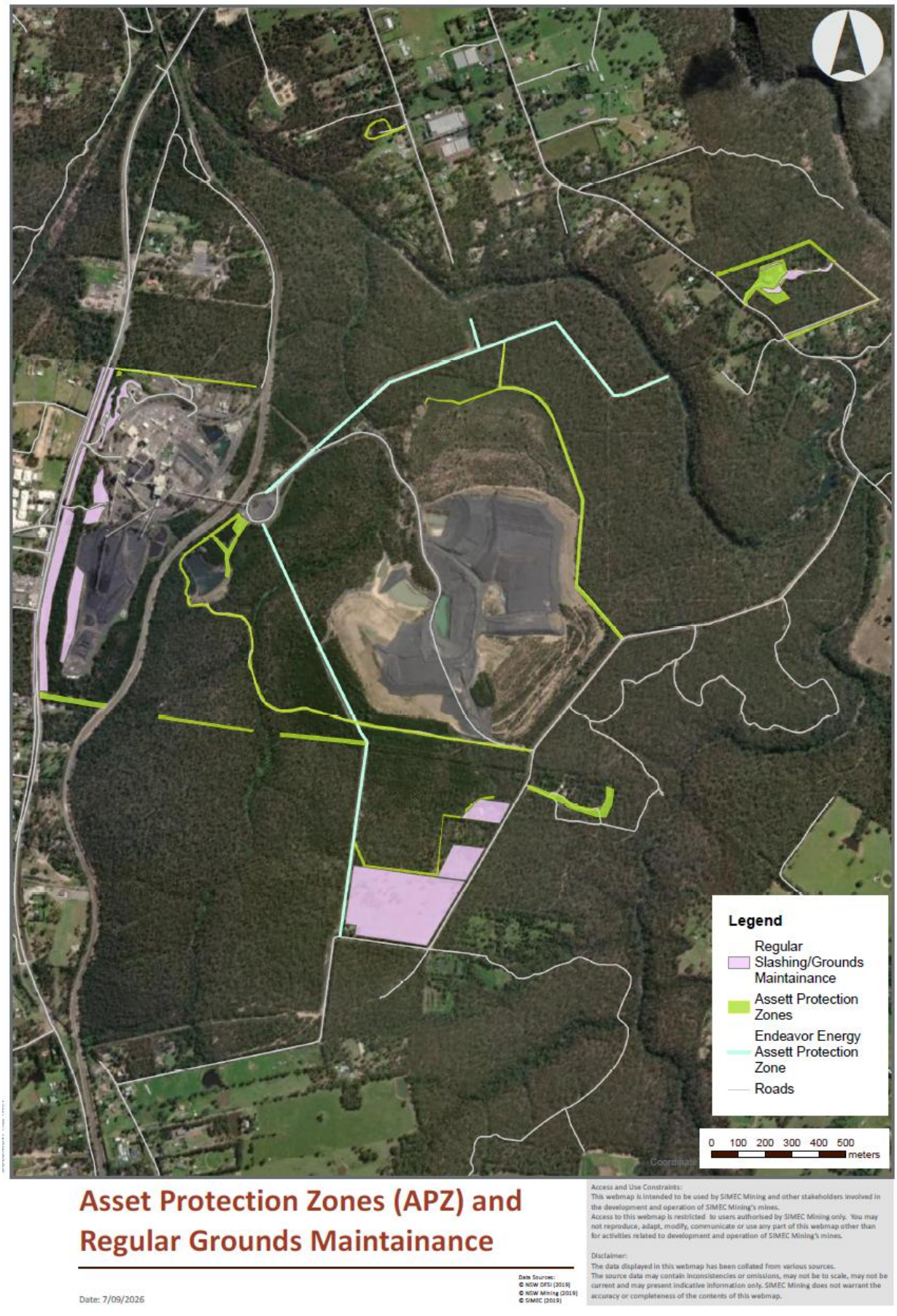


Figure 16-1 Asset Protection Zones (APZ) and Grounds Maintenance for Tahmoor Coal

17 Traffic Management

Traffic is managed in accordance with the approved Traffic Management Plan (available on the Tahmoor Coal website), which has been prepared to address the requirements of Condition B7 of the Tahmoor South SSD 8445 development consent and has been managed in accordance with conditions B61, B62, B67, A10, A11, A13, A15 of consent SSD 8445.

During the reporting period, there have been no train or truck movements to the REA due to the cessation of mining operations following the completion of Longwall S3A on the 17 December 2024. In accordance with condition B61 of SSD 8445, there will be no supporting appendices with no movements or tonnes to report for truck and train movements during this reporting period.

No non-compliances have occurred for the reporting period.

Tahmoor Coal operations have been compliant with condition A13 of consent SSD8445 due to no train movements recorded during the reporting period.

18 Community

18.1 Community Engagement Activities

Tahmoor Coal recognises that genuine partnerships with stakeholders and local communities are an essential part of community engagement.

Tahmoor Coal has established a good working relationship with the local community throughout its operations and seeks to continue this as new projects are established. There is a focus on providing timely and accurate information regarding its performance to its varied stakeholders.

The method of consultation used varies depending on the scale of project, stakeholder type and preferred method of communication.

The following consultation methods are commonly used to communicate and engage with stakeholders:

- Newsletters – distributed by email, website, post and printed posters displayed in various locations;
- Resident Information Packs – Distributed to residents in current and future proposed mining areas and website;
- Face to face consultation meetings, eg. Local landholders, schools, businesses and community groups;
- Website (https://www.tahmoorcolliery.com.au/) containing a variety of information and reports;
- 24-hour complaints line – phone number displayed on newsletter, website and distributed as required;
- Tahmoor Colliery Community Consultative Committee (TCCCC) Meetings – four (4) quarterly meetings held in 2025 (6 March, 5 June, 4 September and 4 December);
- Community Information Sessions – as required at various locations (open to all members of the public).
- Displays of Tahmoor Coal operations at community events; and
- Annual Environmental Management Reports – distributed to TCCCC and available on Tahmoor Coal website.

18.2 Community Contributions

Tahmoor Coal contributes to the social and economic development of sustainable communities associated with its operations and ensures the rights of communities in which it operates are respected and supported. This is achieved by:

- Identifying the communities and stakeholders associated with our operations and actively engaging with them as early as possible and throughout the life cycle of the operations to establish relationships based on mutual benefit and active participation;
- Respecting the cultural, customs, interests and rights of communities, including indigenous peoples and vulnerable or disadvantaged groups;
- Working with governments, local authorities, community representatives, inter-governmental and non-governmental organisations and other interested parties to develop and support projects that benefit the communities associated with our operations; and

- Contributing an indicative amount of $200,000 each year to fund initiatives that benefit the communities associated with our operations, particularly those located in more remote areas or in regions with a lower level of social and economic development and infrastructure.

18.3 Community Investment Program

In early 2025, Tahmoor Coal stood down its workforce due to financial constraints being experienced by the parent company which impacted Tahmoor Coal's operations. For this reason, Tahmoor Coal's funding was limited for community investment opportunities in 2025, however support was provided for the following local community initiatives:

- Bargo Public School SpellEx Program: The SpellEx Program was rolled out to Year 3 and 4 primary school students to improve spelling using a wide range of resources. The program kit contains lessons, teaching resources, online courses, slideshows, workbooks and assessments every two weeks to track progress. Tahmoor Coal provided a grant of $9,807 to continue the SpellEx Program at Bargo Public School.
- Bargo Bunnies Junior Rugby League Football Club: Tahmoor Coal provided $10,000 as the major sponsor for the second consecutive year to assist the junior club with registration costs and uniforms.
- South West Sydney Academy of Sport (SWSAS) Bound for Brisbane 2032 Program: Tahmoor Coal provided a grant of $5,000 to support school aged athletes as they prepare for the Brisbane Olympics.

In accordance with the Tahmoor Coal Community Development Plan and Community Investment Program, all community investment activities, whether financial or in-kind support, should target the following group-wide focus areas:

- Community development;
- Education;
- Health; and
- Environment.

An overview of the Tahmoor Coal community contributions during 2025 are outlined in **Table 18-1** below.

Table 18-1 Community Contributions in 2025

Category	Contributions in 2025
Community Development	$11,500.00
Health	$5,000.00
Education, Art & Culture	$11,807.30
Total	**$28,307.30**

18.4 Community Complaints

No community complaints were received for the reporting period, refer to **Figure 18-1.**

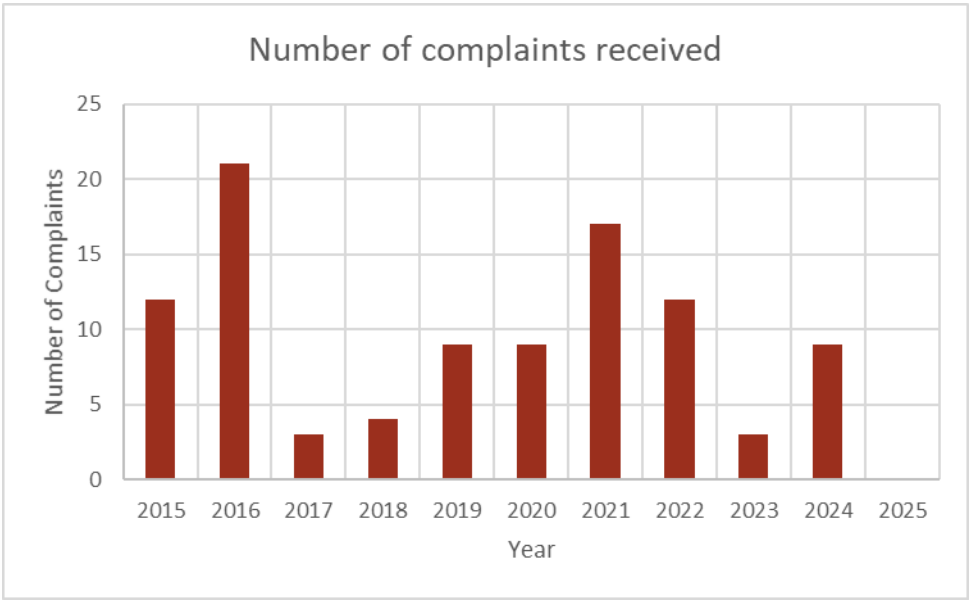


Figure 18-1 Community Complaint Statistics

19 Incidents, Notifications and Non-Compliances

Tahmoor Coal had a total of seven (7) non-compliances and zero (0) reportable environmental incidents during the reporting period. In addition, Tahmoor Coal had twenty-two (22) occurrences of TARP triggers for environmental and built features during the reporting period. A summary of all environmental incidents and notifications for 2025 is outlined within **Table 19-1**.

Table 19-1 2025 Non-compliances, Incidents and notifications

Date	Classification (if required)	Type	Location	Details	Action(s) taken
Non-Compliances					
6/03/2025	Surface water monitoring	Non-compliance	Off-site	Water quality monitoring samples for surface water were not taken for offsite monitoring sites for the month of February.	Issue escalated to resolve contractual dispute regarding payment for the month of February. Monitoring re-instated for following month.
7/05/2025	Groundwater borehole monitoring	Non-compliance	Off-site	Water quality monitoring samples for groundwater boreholes were not taken for offsite monitoring sites for the month of April.	Issue escalated to resolve contractual dispute regarding payment for the month of April. Monitoring re-instated for following month.
24/06/2025	Dust Monitoring	Non-compliance	Off-site	Quarterly Dust monitoring samples were not taken for two (2) offsite monitoring locations for Quarterly One (Q1) 2025.	Issue escalated to resolve contractual dispute regarding payment. Monitoring re-instated for following scheduled monitoring period.
01/10/2025	Groundwater borehole monitoring	Non-compliance	Off-site	Water quality monitoring samples for groundwater boreholes were not taken for offsite monitoring sites for the month of September.	Issue escalated to resolve contractual dispute regarding payment for the month of September. Monitoring re-instated for following month.

Date	Classification (if required)	Type	Location	Details	Action(s) taken
Non-Compliances					
01/10/2025	Noise Assessment	Non-compliance	Off-site	Noise assessment not undertaken for offsite monitoring sites for Quarter 3 2025.	Issue escalated to resolve contractual dispute regarding payment for the Q3 Noise Assessment. Monitoring will be re-instated for following quarter.
17/12/2025	Biodiversity Monitoring	Non-compliance	Off-site	Biodiversity monitoring not undertaken for offsite monitoring sites for Spring 2025.	Issue escalated to resolve contractual dispute regarding payment for the next Biodiversity Assessment. Monitoring will be re-instated for following monitoring period.
17/12/2025	Surface water monitoring	Non-compliance	Off-site	Water quality monitoring samples for surface water were not taken for offsite monitoring sites for the month of December.	Issue escalated to resolve contractual dispute regarding payment for the month of December. Monitoring to be re-instated for following month.
Incidents					
No reportable environmental incidents occurred during 2025.					
Notifications					
No notifications occurred during 2025.					

20 Activities to be completed during the next reporting period (1 January – 31 December 2026)

The following activities are aimed to improve the environment and/or community performance of Tahmoor Coal and are planned to be completed during the next reporting period:

- Continued monitoring of completed remediation works undertaken on Myrtle Creek and Redbank Creek CMAP;
- Further improvement to the site water management system including operation of the Water Treatment Plant for processing discharge waters;
- Continue Aquatic Health Monitoring Program for Bargo River as directed in EPL 1389;
- Continued community engagement for Tahmoor South mining; and
- Undertake studies required to support the Extraction Plan for LW S1B-S6B, including obtaining baseline monitoring data from surface water and groundwater monitoring.

21 Related Documents

Related Documents directly related to or references from this document are provided below in **Table 21-1**.

Table 21-1 Related Documents

Document Title	Document Number
Tahmoor South Air Quality and Greenhouse Gas Management Plan	TAH-HSEC-00379
Tahmoor South Water Management Plan	TAH-HSEC-00369
Tahmoor south Groundwater Management Plan	TAH-HSEC-00373
Tahmoor South Noise Management Plan	TAH-HSEC-00372
Tahmoor South Biodiversity Management Plan	TAH-HSEC-00378
Tahmoor South Bushfire Management Plan	TAH-HSEC-00377
Tahmoor South Traffic Management Plan	TAH-HSEC-00370
Erosion & Sediment Control Plan	TAH-HSEC-00374
Weed Management Procedure	TAH-HSEC-00107
Rehabilitation Management Plan	TAH-HSEC-00402
Rehabilitation Strategy	TAH-HSEC-00401
Longwall S1A-S6A Extraction Plan	TAH-HSEC-00360
LW S1A-S6A Subsidence Monitoring Program	TAH-HSEC-00367
LW S1A-S6A Biodiversity Management Plan	TAH-HSEC-00363
LW S1A-S6A Heritage Management Plan	TAH-HSEC-00364
LW S1A-S6A Land Management Plan	TAH-HSEC-00362
LW S1A-S6A Built Features Management Plan	TAH-HSEC-00366
LW S1A-S6A Public Safety Management Plan	TAH-HSEC-00365
LW S1A-S6A Water Management Plan	TAH-HSEC-00361
Australian Wildlife Sanctuary Management Plan	MSEC1074
Wollondilly Shire Council Management Plan	MSEC1193-03
Jemena Management Plan	MSEC1193-06
Sydney Potable Water Management Plan	MSEC1193-04
Sydney Water Sewer Management Plan	MSEC1193-05
Telecommunications Management Plan	TAH-HSEC-00362
Wollondilly Anglican College Management Plan	MSEC1193-11
Bargo Chicken Breeder Production Complex Management Plan	MSEC1193-14
Tahmoor Garden Centre Management Plan	MSEC1193-15
Aboriginal Cultural Heritage Assessment: Amended Tahmoor South Project (Niche, 2020)	

Conceptual Mine Closure Plan	TAH-HSEC-00121
Tahmoor South A Series: Aquatic Monitoring Report Autumn 2025	Stantec, 2026a
Tahmoor South A Series: Terrestrial Monitoring Report Autumn 2025	Stantec, 2026b

22 Abbreviations

Abbreviations used in this document are provided below in **Table 24-1**.

Table 22-1 Abbreviations

Abbreviation	Definition
ACM	Asbestos containing materials
AEMR	Annual Environmental Management Report
APZ	Asset Protection Zones
ASTs	Above ground storage tanks
AUSRIVAS	Australian River Assessment System
BC Act	*Biodiversity Conservation Act 2016*
BMP	Bushfire Management Plan
CCL	Consolidated Coal Lease
CHPP	Coal Handling Preparation Plant
CMAP	Corrective Management Action Plan
DA	Development Application
DC	Development Consent
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DPIE	Department of Planning, Industry and Environment
DPHI	Department of Planning, Housing and Infrastructure
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EPL	Environmental Protection Licence
ERG	Tahmoor Coal Environmental Response Group
GHG	Greenhouse gas
GIS	Global Information System
HHRT	Historical Heritage Technical Report
IPC	Independent Planning Commission
km	Kilometre
KL	Kilolitres
LDP1	Licenced Discharge Point 1
LMZ	Land Management Zones
LOP	Licenced Overflow Point
LW	Longwall
LW W1	Longwall West 1
LW W1-W2	Longwall West 1 and Longwall West 2

Abbreviation	Definition
LW W2	Longwall West 2
LW W3	Longwall West 3
LW W3-W4	Longwall West 3 and Longwall West 4
LW W4	Longwall West 4
LW S1A	Longwall South 1A
LW S1A-S6A	Longwalls South 1A to South 6A
LW S2A	Longwall South 2A
LW S6A	Longwall South 6A
m	Metres
ML	Mining Lease
MOP	Mining Operation Plan
NC	Non-Compliance
NGERS	National Greenhouse and Energy Reporting
NSW	New South Wales
ODS	Ozone depleting substances
OSP	Open Stand Pipe
PCBs	Polycholorinated Biphenyls
PIRMP	Pollution Incident Response Management Plan
PM10	Particulate Matter smaller than 10 micrometres
PRP	Pollution Reduction Program
QA	Quality assurance
RAPs	Registered Aboriginal Parties
REA	Refuse Emplacement Area
RFS	Rural Fire Service
RWTP	Recycled Water Treatment Plant
Resources Regulator	Department of Regional NSW – Resources Regulator
ROM	Run of Mine
SFZ	Strategic Fire Zones
SLR	SLR Consulting Australia Pty Ltd
SMF	Synthetic Mineral Fibre
TSS	Total Suspended Solids
Tahmoor Coal	Tahmoor Coal Pty Ltd
Tahmoor Mine	Tahmoor Coal Mine
TARP	Trigger Action Response Plan
TCCCC	Tahmoor Colliery Community Consultative Committee
USTs	Underground storage tanks

Abbreviation	Definition
VWP	Vibrating Wire Piezometer
WAL	Water Access Licence
WCAMP	Watercourses Corrective Action Management Plan
WLEP	Wollondilly Local Environment Plan
WMP	Water Management Plan
WTP	Water Treatment Plant

23 Appendices

Table 23-1 Appendix Details

Appendix Number	Details
Appendix 1	Quarterly Noise Monitoring Assessment Results
Appendix 2	Licence Discharge and Overflow Monitoring Sites
Appendix 3	Dam Water Volumes
Appendix 4	Surface Water Management Schematic
Appendix 5	Surface Water Monitoring Graphs
Appendix 6	Pit-top and REA Groundwater Monitoring data
Appendix 7	2025 Annual Rehabilitation Walkover Report
Appendix 8	Closure Domains
Appendix 9	2025 Annual Surface Water Report
Appendix 10	2025 Annual Groundwater Report
Appendix 11	Annual Subsidence Report (2025)
Appendix 12	Western Domain Residual Subsidence Quarterly Monitoring Reports (2025)
Appendix 13	Western Domain Residual Groundwater Monitoring Report (2025)
Appendix 14	Tahmoor South A-Series: Aquatic Monitoring Report Autumn 2025