

- Minutes:** Minutes of the Meeting of the Maules Creek Coal Community Consultative Committee held on **Wednesday 28 August 2024** at the Boggabri Golf Club commencing at 1.15 pm.
- Members Present:** Elizabeth O’Hara (EOH) – Community Representative, Robyn Grover (RG) – Community Representative, Steve Eather (SE) – Community Representative, Cr Brett Dickinson – (BD) Narrabri Shire Council, Emma Bulkeley (EB) – WHC.
- Apologies:** Libby Laird (LL) – Community Representative, Darren Swain (DS) – WHC,
- Observers:** Jorge Moraga - General Manager Maules Creek Operations, Kent Taylor – WHC, Scott Mitchell (SM) – WHC, Daniel Holm (DH) – Square Peg Social Performance, James Tomlin (JT) – Australian Groundwater & Environmental Consultants
- Independent Chair:** Michael J. Silver OAM (MJS)

Agenda Item	Discussion	Action/By Whom
1.	Welcome and Apologies – MJS welcomed everyone to the meeting as Chair.	
2.	Acknowledgement of Country - The Chair acknowledged the Traditional Owners of the land on which the meeting is being held and their continuing connection to land, water, and culture, paying respects to their Elders past, present and emerging.	
3.	Declaration of Pecuniary or Other Interests - EOH has a small bundle of WHC shares. RG has a family member working at Maules Creek Coal Mine. MJS expenses as chair are borne by the proponent.	
4.	Minutes of the Previous Meeting – The minutes of the meeting of 25 May 2024 were approved on 6 June 2024.	
5.	Business Arising from the Previous Minutes Nil	
6.	<p>Actions</p> <p>6.1 MJS to review February 2024 Minutes - Completed</p> <p>6.2 MJS to respond to R. Druce that the matter needs to be taken up with NSC and the RFS - Completed</p> <p>6.3 MJS to respond to Mr Laird that there are fundamental issues that need to be addressed - Completed</p> <p>6.4 EB to advise how groundwater data is sourced - Completed</p> <p>6.5 MJS to contact UNSW regarding availability of ground water data.</p> <p>Response: MJS advised that given potential intellectual property issues and the legal right to request the ground water data from UNSW he had discussed the matter with the Proponent and sought a statement from its consultant Australasian Groundwater and Environmental (AGE) Consultants regarding incorporation of the UNSW into the Maules Creek Continuation Project EIS. AGE provided the following response:</p> <ul style="list-style-type: none"> ▪ Australasian Groundwater and Environmental (AGE) is preparing the Groundwater Assessment for the Maules Creek Continuation Project EIS. ▪ The existing Boggabri-Tarrawonga-Maules (BTM) groundwater model is being recalibrated and will include groundwater monitoring data collected from privately-owned, mine-owned and government-monitored bores since the previous model update. ▪ The University of NSW (UNSW) maintains groundwater monitoring bores in the Maules Creek area and has completed research on the groundwater regime in the Middle Creek area. ▪ UNSW publications on the groundwater regime in the Middle Creek area have been considered in the development of the updated conceptual model. ▪ Data from six UNSW bores (BH17, BH18, BH19, BH20, BH21 and BH22) was provided by UNSW in June and August 2024 which has been incorporated in the groundwater model calibration process. ▪ The Groundwater Assessment will include reporting on the model performance against monitored groundwater levels including the UNSW bores 	

	<ul style="list-style-type: none"> ▪ AGE has processed the recent UNSW data and incorporated it into the calibration dataset. <p>6.6 DS to provide locations of monitoring bores - Completed</p> <p>6.7 MJS to discuss the environmental representative on the CCC with DPHIE</p> <p>Response: MJS advised that he had brought the issue to the attention of DPHIE. It was noted that there is no specific capability requirement for an environmental representative. MJS reported that a public call for nominations for the Aboriginal representative position and a community representative with environmental interests, had been placed by the Proponent in the Narrabri Courier and Gunnedah Times newspapers in accordance with the Community Consultative Committee Guideline and close mid-September 2024.</p>	
7.	<p>Chair’s Minute</p> <p>7.1 Special Meeting – 24 July 2024</p> <p>I report on the Special Meeting of the Maules Creek Coal Community Consultative Committee scheduled to be held on 24 July 2024 at Boggabri Golf Club commencing at 1.00 pm to specifically receive a presentation from the Proponent on the new Biodiversity Management Plan and discuss a submission to the document should the Committee wish to do so. The Proponent is required to undertake consultation with the Community Consultative Committee as part of the Management Plan review process.</p> <p>All arrangements for the meeting were initiated and completed, with notice of the meeting forwarded to Committee members.</p> <p>At approximately 12.55 pm on 24 July 2024, in the meeting room of the Boggabri Golf Club, I was approached by Ms Elizabeth O’Hara and Ms Roselyn Druce [alternate for Ms Libby Liard] who advised that they would not be attending the meeting and tendered apologies. Both ladies handed me written advice as to their reason for not attending the meeting. The conversation and discussion with me associated with the reasons for the lodgement of their apologies extend over a period of about 25 minutes.</p> <p>Following their departure, I discussed their apologies with the other two Committee members present for the meeting, Ms Robyn Grover and Cr Brett Dickinson together with the Whitehaven staff who were to make the presentation. It was pointed out by Whitehaven staff that the presentation would take about an hour and 15 minutes to present. At this point Councillor Dickinson advised he had business commitments shortly after 2.00 pm and would have to leave the meeting. Given that this would only leave one community member in attendance for the bulk of the presentation it was agreed by Cr Dickinson and Ms Grover that the meeting does not proceed. I abandoned the meeting at 1.30 pm.</p> <p>Following discussion with the Proponent’s representatives it was agreed that hard copies of the presentation and the enlarged maps (requested previously by Committee members) be forwarded to each member of the Committee. I subsequently forwarded these documents to the members.</p>	

	<p>I spoke with the Department of Planning shortly after the meeting and advised that the meeting to discuss the Biodiversity Management Plan had been abandoned and outlined the background to the matter.</p> <p>RG supported the Chair’s minute and expressed disappointment that the two apologies had been tendered only minutes before the meeting was scheduled to start.</p> <p>BD questioned whether the meeting needed a quorum. The Chair responded that the committee’s primary purpose is for consultation – it is not a decision-making body and has no statutory capability.</p>	
8.	<p>Correspondence</p> <p>8.1 Complaints: The Chair advised that he had been copied on emails regarding two complaints to the NSW Department of Planning, Housing and Infrastructure relating to the Community Consultative Committee not having a person with an environmental interest and a representative of the Aboriginal community as members of the Committee as well as concerns regarding the consultation process associated with the development of a new Biodiversity Management Plan for the Maules Creek Coal Mine.</p>	
9.	<p>Environmental Monitoring Report</p> <p><i>A copy of the Monitoring Report is attached to the minutes</i></p> <p>The Environmental Monitoring Report was distributed to members prior to the meeting. There were no questions raised in relation to the report.</p> <p>EOH requested that a key to bore numbers be provided to permit identification of the location of bores.</p>	
10.	<p>Proponent’s Presentation</p> <p><i>SM introduced the Proponent’s Presentation relating to the Maules Creek Coal Continuation Project. A copy of the presentation is attached to the minutes.</i></p> <p>Maules Creek Coal Continuation Project</p> <p>Overview</p> <p>SM provided an overview of the Maules Creek Coal Continuation Project and a description of the components of the Project. He highlighted the proposed water transfer pipeline to be constructed between Maules Creek Coal Mine water transfer pipeline network and the approved Tarrawonga Coal Mine/Vickery Extension Project which will enable water sharing efficiencies with the other mining operations during dry and wet conditions.</p> <p>SM noted the specialist studies being undertaken in relation to the Project relative to the Secretary’s Environmental Assessment Requirements (SEARS) for preparation of the Environmental Impact Statement (EIS).</p>	

SM stepped the Committee through the work to be undertaken in relation to Biodiversity, Surface Water, Noise and Air Quality. He then outlined the various steps in the EIS assessment and determination process. He indicated that it is anticipated the EIS will be lodged with the NSW Department of Planning, Housing and Infrastructure (DPHI) in the first quarter of 2025.

EOH sought clarification on the Environment Protection and Biodiversity Conservation Act 1999 referral as to whether it will be subject auditing requirements because water is not affected. SM responded that work is still be undertaken on groundwater impacts, it is therefore premature to make judgement on the implications at this stage. If there is an impact this will be addressed in the EIS. He added that this will be part of the assessment on ecology and water, whether it is a controlled or not a controlled action, by the Commonwealth. Prior to determining an EPBC approval, the Commonwealth will take into consideration the assessment by NSW DPHI of the EIS as part of a bilateral assessment agreement with NSW. EOH noted the Boggabri mine had a similar situation – SM declined to respond. SM commented that it was likely to be a controlled action, but this was a matter for the Commonwealth.

<https://epbcpublicportal.awe.gov.au/all-referrals/project-referral-summary/?id=277dc043-5a42-ef11-a316-002248102e3c>

Social Impact Assessment

Daniel Holt, Square Peg Social Performance provided a presentation of progress of the Social Impact Assessment (SIA). A copy of the presentation is attached to the minutes.

DH noted that he had made a preliminary presentation to the CCC at its February 2024 meeting. He then proceeded to step the Committee through his slide presentation. He highlighted that the SIA puts people and their experience of change at the centre of the assessment.

DH then explained the three phases of the SIA process – Scoping ~ Report ~ Management Plan. He then outlined the identified impacts – both positive and negative. EOH questioned the depth and adequacy of the SIA analysis having regard to local impacts on individuals.

DH then detailed the various management plans, initiatives and strategies that currently contribute to managing social impact associated with the Maules Creek Coal Mine.

DH provided an outline of the recommendations of the SIA that Whitehaven review and updates the Maules Creek Coal Mine Social Impact Management Plan considering actions across six themes:

- ❖ Economic Development
- ❖ Community Development
- ❖ Housing and Accommodation
- ❖ Land and Water Management

- ❖ Planning for a Future Beyond Closure
- ❖ Communication and Engagement

DH then provided a more in-depth analysis of the six themes.

- **Economic Development** – DH specifically mentioned the development of pre-employment programs and maximising existing strategies that support business in the region.
- **Community Development** – DH noted the community investment program and suggested a review of distribution to take account of impacts may be appropriate. He also acknowledged the decline in the Maules Creek population and the need for Whitehaven and the community to co-develop methods to seek to stem population decline.
- **Housing and Accommodation** – DH indicated an ongoing commitment is required to continue to address housing and accommodation impacts.
- **Land and Water Management** – DH suggested there needs to be increased engagement and information provision around groundwater management noting there is degree of community concern around water impact. He added there is a need to engage with and support local Rural Fire Service (RFS) brigades.
- **Planning for the Future** – DH strongly suggested that Whitehaven engage with the community and local councils to secure the socio-economic future of the region, noting that “social closure planning is often too soon till its too late”. Accordingly, it is essential that processes are put in place early so that the “community owns its future”.
- **Communication and Engagement** – DH suggested continued engagement with the community through a variety of mechanisms to ensure awareness of social and environmental performance.

MJS questioned what implications this SIA would have for the current and future Voluntary Planning Agreement arrangements. SM responded that it is premature at this stage to assess the implications on the Voluntary Planning Agreement, however negotiation with the Council will be required.

Groundwater Assessment

James Tomlin, Australian Groundwater & Environmental Consultants provided a presentation of progress of the Groundwater Assessment. A copy of the presentation is attached to the minutes.

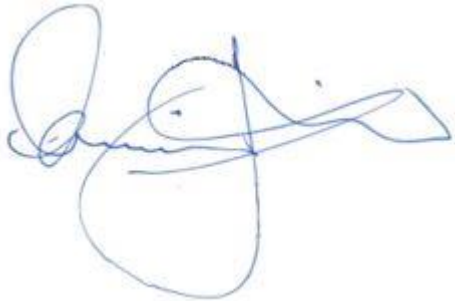
JT provided an overview of the groundwater assessment being undertaken. He outlined the six key stages in the process via a flow chart to determine the ‘effects’. He advised that AGE’s 2019 Boggabri-Tarrawonga-Maules (BTM) groundwater model is being updated, and impact assessment completed with input from the NSW Government (DCCEEW-water). The revised model will be subject to an external peer reviewer.

	<ul style="list-style-type: none"> • Data Review – JT noted there is good data available dating back to the 1970s. He advised that research data from the University of NSW (UNSW) bore monitoring will be utilized and provides an understanding of flows down the creeks and infiltration into the aquifer system. • Data Collection – JT commented that it is important data is relevant to the questions to be answered. He outlined the various sources from which data will be obtained. • Conceptual model – JT explained how to use the information gathered to build a conceptual model. He also detailed how previous conceptual models are used to establish the ‘picture’ and determine project impacts. • Numerical Model – JT explained the purpose of the numerical model. He advised on how it is constructed and calibrated noting that the source~pathway~receptor data is critical to the calibration. • Impact Assessment – JT advised that if there are unacceptable impacts an analysis is undertaken having regard to the NSW Aquifer Interference Policy (AIP) to determine the level of impact. <ul style="list-style-type: none"> ▪ <i>Level 1</i> - No action ▪ <i>Level 2</i> - Management and mitigation <p>EOH asked whether there is a project in the past, following assessment, that should not have proceeded? JT advised that prior to the introduction of the AIP requirements were less stringent. There is now a requirement for greater assessment and evaluation. EOH questioned whether projects have not proceeded where impacts have been great? JT indicated that where impacts have been significant, some projects have not proceeded.</p> <ul style="list-style-type: none"> • Reporting – JT outlined the reporting requirements, noting there will be recommended mitigation measures and monitoring. <p>SE commented that it is a complex and difficult area to assess – with a need for more data. JT acknowledged there is a level of uncertainty however the impacting factors are considered in the modelling process. EOH questioned how climate change is considered in the modelling. JT responded that climate change is an issue particularly the implications of extreme weather events. He noted that a range of impacts are considered in the calibration of the model.</p> <p>The Chair thanked Mr Holm and Mr Tomlin for their presentations.</p>	
<p>11.</p>	<p>Other Agenda Items</p> <p>11.1 Land and Environment Court matters – EOH stated that there have been twelve matters relating to alleged blasting violations that have been raised in the recent Land and Environment Court matter Maules Creek Community Council v EPA. She believed these issues should have been considered in the Independent Environmental Audit process. The Chair determined that given the late notice of EOH’s concerns it was premature to consider the information at the meeting.</p> <p><i>Chair’s note: Late correspondence on this matter has been received from EOH. It will be listed in correspondence on the agenda of the October meeting.</i></p> <p>11.2 Air Quality Monitoring – EOH questioned the extent of PM2.5 monitoring. She noted higher PM2.5 levels on 11 August 2024 on the EPA’s Maules Creek monitoring station. EB advised this was not due to emissions from Maules Creek Coal Mine.</p>	

	https://www.epa.nsw.gov.au/your-environment/air/regional-air-quality/namoi-air-quality-monitoring-project/maules-creek-monitoring-station	
12.	General Business Nil	
13.	Next meeting MJS advised EOH had requested that the timing of meetings be reviewed. He indicated he would examine options but indicated it was unlikely that the dates for the October meeting round would be changed due to the holding of the Leard Forest Environmental Trust AGM and the BTM Joint CCC meeting at that time. The next meeting is scheduled for 23 October 2024 at the Boggabri Golf Club.	

Meeting Closed: 3.26 pm.

Approved:



Michael J. Silver
Independent Chair

30 September 2024

Appendix 1: Actions

Action No.	Description	Date Raised	Page No.	Status
1	MJS to review February 2024 minutes.	15.05.24	2	COMPLETED 24.06.24
2	MJS to respond to R. Druce that the matter needs to be taken up with NSC and the RFS	15.05.24	2	COMPLETED 24.06.24
3	MJS to respond to Mr Laird that there are fundamental issues that need to be addressed.	15.05.24	2	COMPLETED 24.06.24
4	EM to advise how groundwater data is sourced.	15.05.24	3	COMPLETED 26.08.24
5	MJS to contact UNSW regarding availability of ground water data.	15.05.24	3	COMPLETED 16.08.24
6	DS to provide locations of monitoring bores.	15.05.24	4	COMPLETED 26.08.24
7	MJS to discuss environmental representative on the CCC with DPIE	15.05.24	4	COMPLETED 08.08.24

Appendix 2: Input from CCC Members for Future Meetings (from October 2023)

Description
Future site tour options: <ul style="list-style-type: none">• Leard Forest Site Tour and presentation.• Tour of bores with hydrologist
Provision of Bush Fire Management Plans once revised.
Management of roads and access for fire management
Results of bird surveys
Experts for noise, dust, and water to attend if interest is there
When do the water models get updated?

Maules Creek Coal Mine Community Consultative Committee Meeting #46

Environmental Monitoring Report For the Q2 period, April – June 2024 January – March 2024

Attended Noise Monitoring

Maules Creek Coal (MCC) engaged an independent acoustic consultant to conduct LAeq (15minutes) and LA1 (1 minute) attended noise monitoring at six monitoring locations on site.

A. NOISE GENERATED BY MCCM AGAINST OPERATIONAL DAY & NIGHT NOISE CRITERIA; April – June 2024 .

The results show that MCCM is within EPL 20221 compliance limits, that operations did not exceed the applicable; LAeq (15minute) 35dB Criteria, LA1 (1Minute) 45dB Criteria and the EPA's Noise Policy for Industry compliance guidelines.

Table 1 – April Noise Monitoring

Location	Start date and Time	Wind		Stability class	Very enhancing? ¹	Limits, dB ¹		Site levels, dB ²		Exceedances, dB	
		Speed m/s	Direction ³			L _{Aeq,15minute}	L _{Amax}	L _{Aeq,15minute}	L _{Amax}	L _{Aeq,15minute}	L _{Amax}
NM1	1/04/2024 22:30	0.5	216	F	No	35	45	IA	IA	Nil	Nil
NM2	1/04/2024 23:30	0.3	0	F	No	39	45	IA	IA	Nil	Nil
NM3	2/04/2024 0:20	0.5	186	F	No	35	45	IA	IA	Nil	Nil
NM4	1/04/2024 23:00	0.5	140	F	No	35	45	IA	IA	Nil	Nil
NM5	1/04/2024 22:00	1.1	209	F	No	35	45	<25	30	Nil	Nil
NM6	1/04/2024 23:55	0.3	0	F	No	35	45	IA	IA	Nil	Nil

Notes: 1. Noise limits are adjusted by +5 dB during 'very enhancing meteorological conditions' in accordance with the NPI.
 2. Site-only LAeq,15minute, includes modifying factor penalties if applicable.
 3. Degrees magnetic north, "-0" indicates calm conditions.

Table 2 – May Noise Monitoring

Location	Start date and Time	Wind		Stability class	Very enhancing? ¹	Limits, dB ¹		Site levels, dB ²		Exceedances, dB	
		Speed m/s	Direction ³			L _{Aeq,15minute}	L _{Amax}	L _{Aeq,15minute}	L _{Amax}	L _{Aeq,15minute}	L _{Amax}
NM1	1/05/2024 22:30	3.3	124	D	Yes	40	50	IA	IA	Nil	Nil
NM2	1/05/2024 23:30	2.3	141	E	No	39	45	<30	<30	Nil	Nil
NM3	2/05/2024 00:21	1.0	151	F	No	35	45	33	36	Nil	Nil
NM4	1/05/2024 23:00	2.8	135	D	No	35	45	IA	IA	Nil	Nil
NM5	1/05/2024 22:00	3.2	122	D	Yes	40	50	IA	IA	Nil	Nil
NM6	1/05/2024 23:55	1.6	148	E	No	35	45	IA	IA	Nil	Nil

Notes: 1. Noise limits are adjusted by +5 dB during 'very enhancing meteorological conditions' in accordance with the NPI.
 2. Site-only LAeq,15minute, includes modifying factor penalties if applicable.
 3. Degrees magnetic north, "-0" indicates calm conditions.

Table 3 – June Noise Monitoring

Location	Start date and time	Wind		Stability class	Very enhancing? ¹	Limits, dB ¹		Site levels, dB ²		Exceedances, dB	
		Speed m/s	Direction ³			L _{Aeq,15minute}	L _{Amax}	L _{Aeq,15minute}	L _{Amax}	L _{Aeq,15minute}	L _{Amax}
NM1	10/06/2024 22:30	0.6	29	F	No	35	45	<25	<25	Nil	Nil
NM2	10/06/2024 23:30	1.1	213	F	No	39	45	34	36	Nil	Nil
NM3	11/06/2024 00:20	0.5	227	F	No	35	45	24	29	Nil	Nil
NM4	10/06/2024 23:00	0.3	35	F	No	35	45	<25	<25	Nil	Nil
NM5	10/06/2024 22:00	0.5	135	F	No	35	45	30	33	Nil	Nil
NM6	10/06/2024 23:55	0.3	0	F	No	35	45	<20	23	Nil	Nil

Notes: 1. Noise limits are adjusted by +5 dB during 'very enhancing meteorological conditions' in accordance with the NPfl.
 2. Site-only L_{Aeq,15minute}, includes modifying factor penalties if applicable.
 3. Degrees magnetic north, "-" indicates calm conditions.

Wind Direction during Attended Monitoring

Wind direction data is collected from the Maule’s Creek Coal Mine (MCCM) Automated Weather Station (AWS). Wind data for the duration of the attended monitoring assessment, recorded at the MCCM AWS is presented in the table below.

Table 4 - Prevailing Wind Direction

Monitoring Date	Prevailing Wind Direction
April	SSE
May	SE
June	SSW

Blast Monitoring

There was 25 blasts at MCCM during Q2 2024. All blast monitoring results recorded within the reporting period have complied with applicable overpressure and ground vibration limits specified in the respective approvals.

Table 5 – Blast Results Summary

Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Noise	dB	All	25	92.41	109.90	120	No
Vibration	mm/s		25	0.10	0.26	10	No

Air Quality

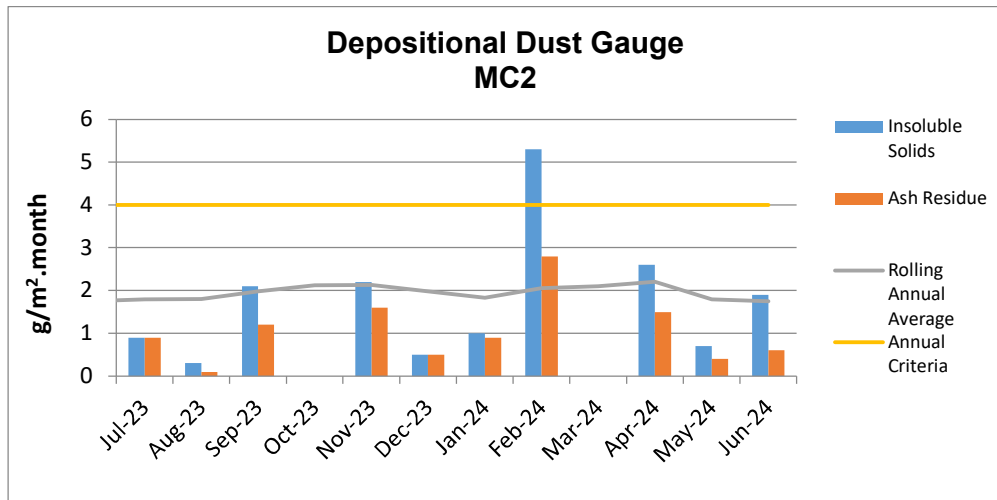
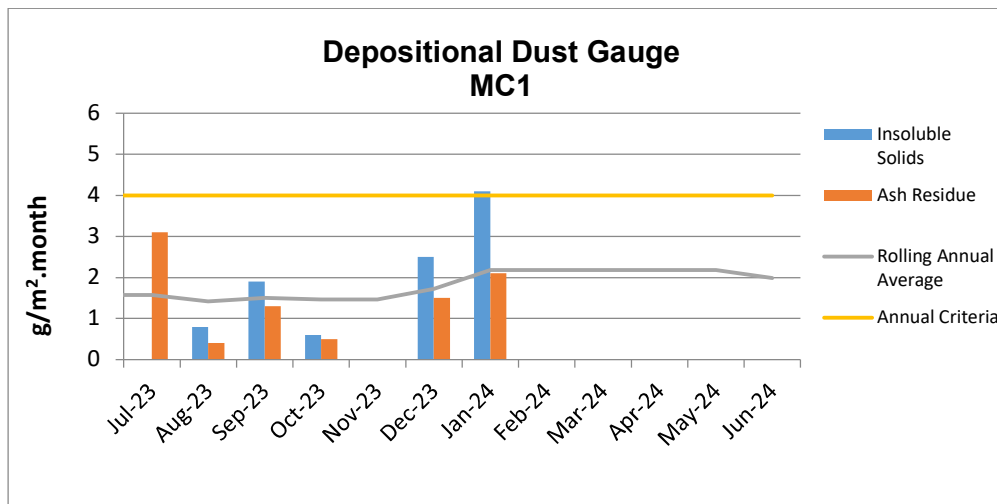
A. Total Depositional Dust

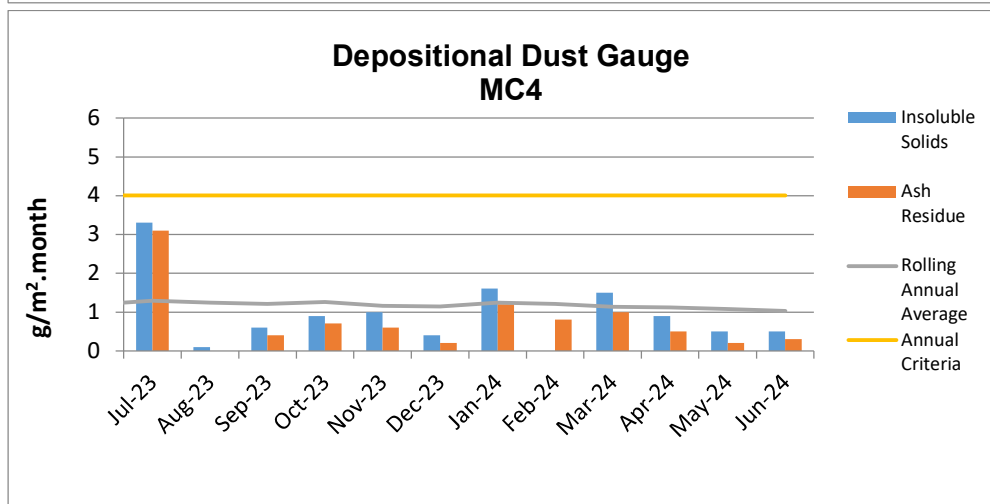
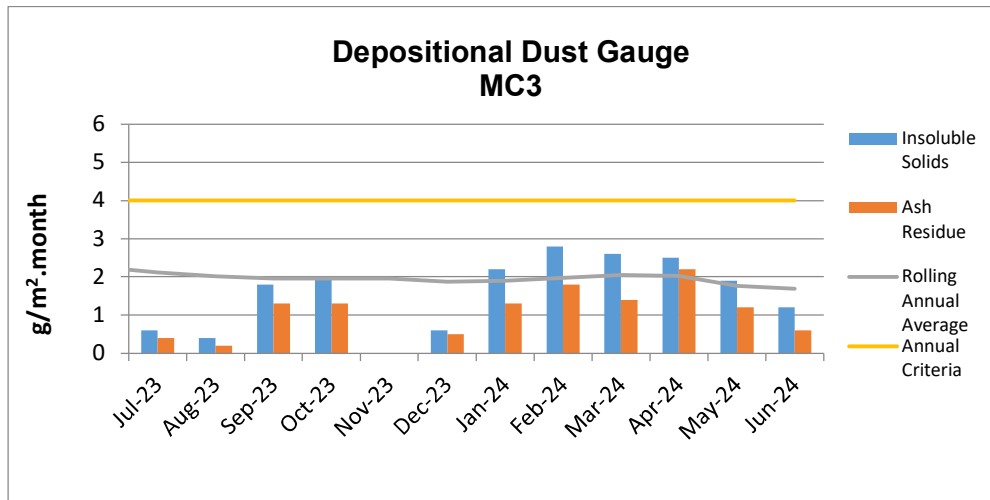
The 12 monthly rolling annual average remains below the relevant Project Approval (PA 10_0138) criteria of 4g/m²/month for the respective monitoring points.

Table 6 – Deposited Dust Gauge Results [g/m²/month]

MONTH	MC1	MC2	MC3	MC4
April	21.5c	2.6	2.5	1.5
May	7.2c	0.7	1.9	0.5
June	7.8c	1.9	1.2	0.5
12 MONTH ROLLING AVERAGE	2.0	1.9	1.2	0.5

^c samples contaminated by bird dropping, decomposed insects or vegetable matter.



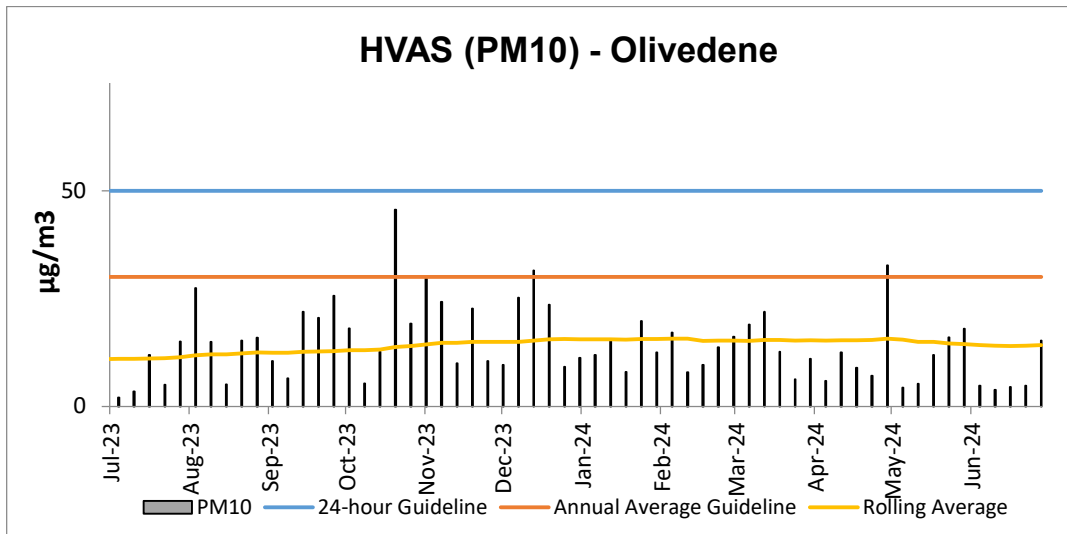


* Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated material (insect larvae, bird droppings, vegetation etc.).

B. High Volume Air Sampling (HVAS)

The HVAS monitor is located on the property 'Olivedene,' a mine owned property on Therribri Road. During past 12 months, there have been no exceedances of the 24-hour average of 50 µg/m³.

HVAS PM₁₀ Rolling Annual Average as of June was **14.2 µg/m³**, which is below the Annual Average Guideline of 30 µg/m³.



C. TEOM - PM10 Results

The annual rolling average for PM10 at the Maules Creek Coal for TEOM1 was **10.9 µg/m³** and at TEOM3 was **13.6 µg/m³** these are both below the Project Approval annual average criteria of 30µg/m³ as shown in the following figure. There have been no exceedances of the 24-hour average for Q2.

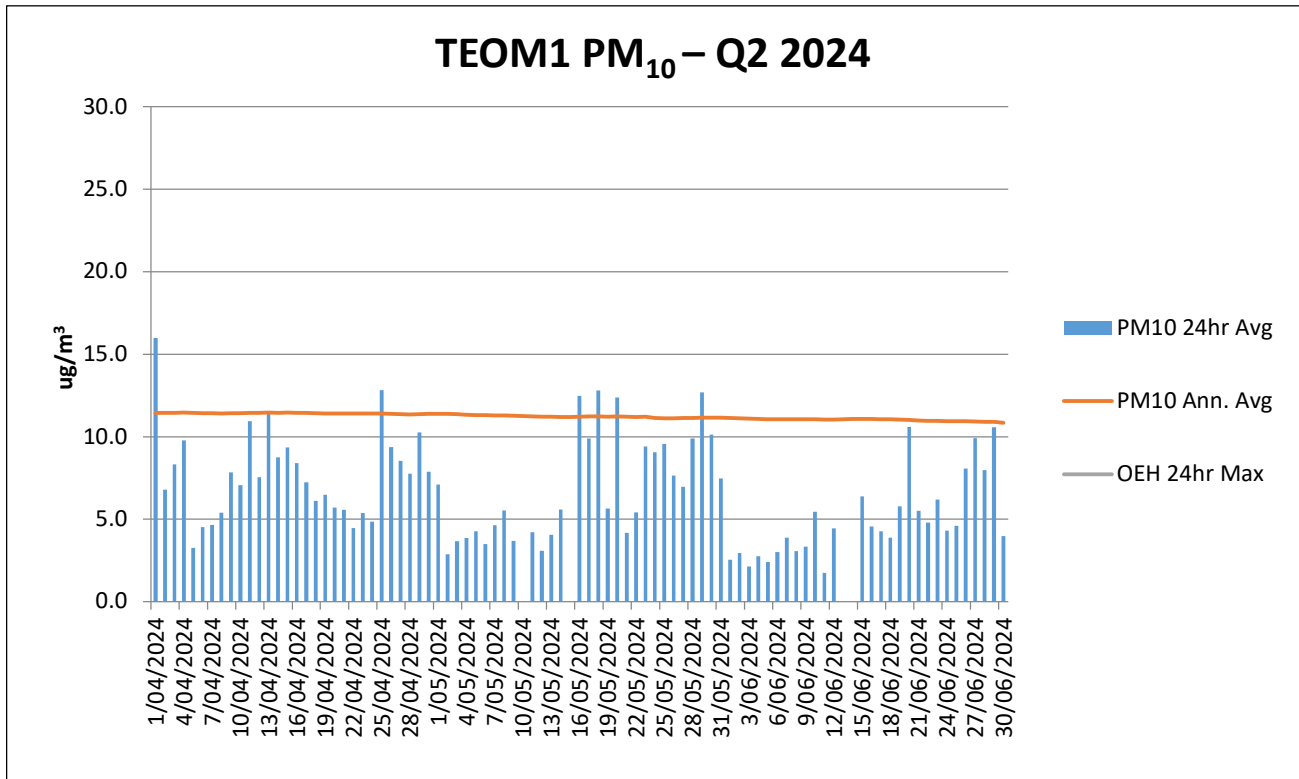


Figure 1 - TEOM Result – Particulate Matter PM₁₀µg/m³

* Blank columns indicate sample periods where there was either power outage, maintenance or other related causes.

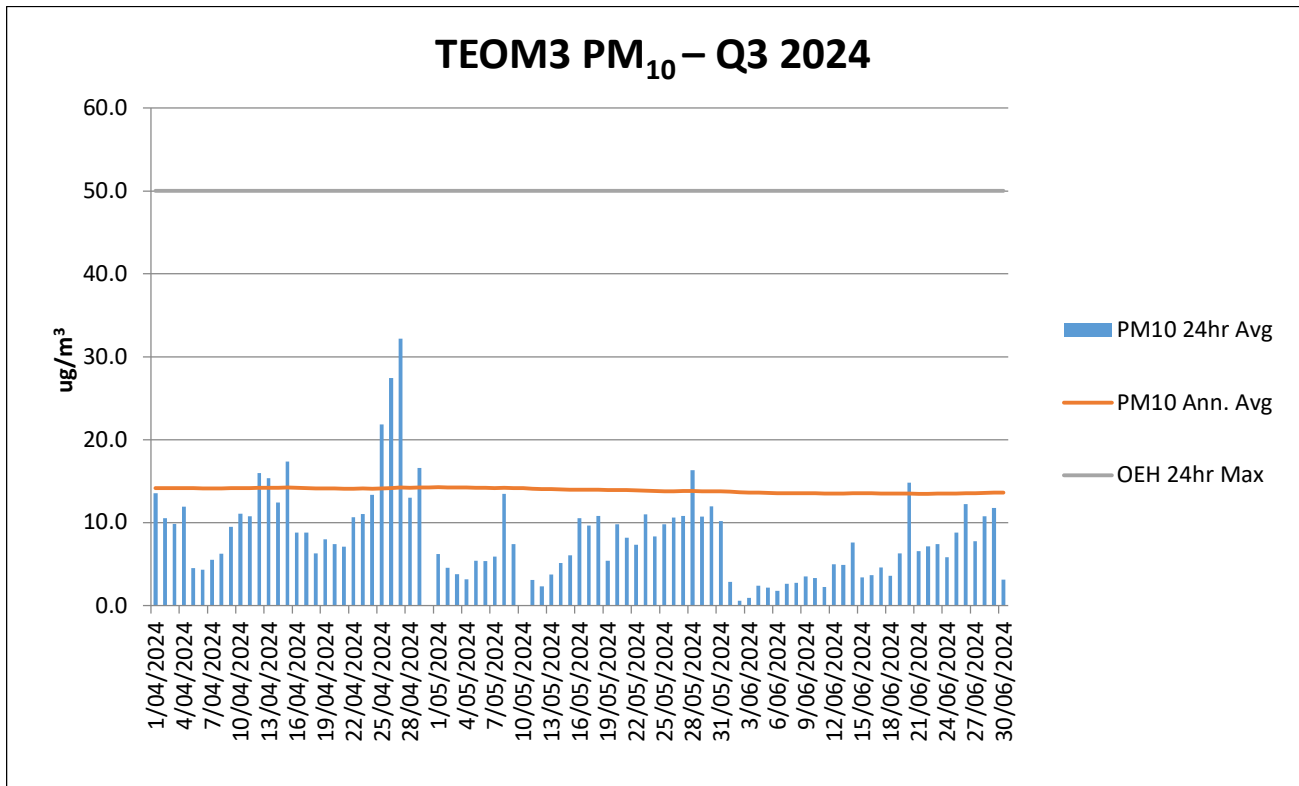


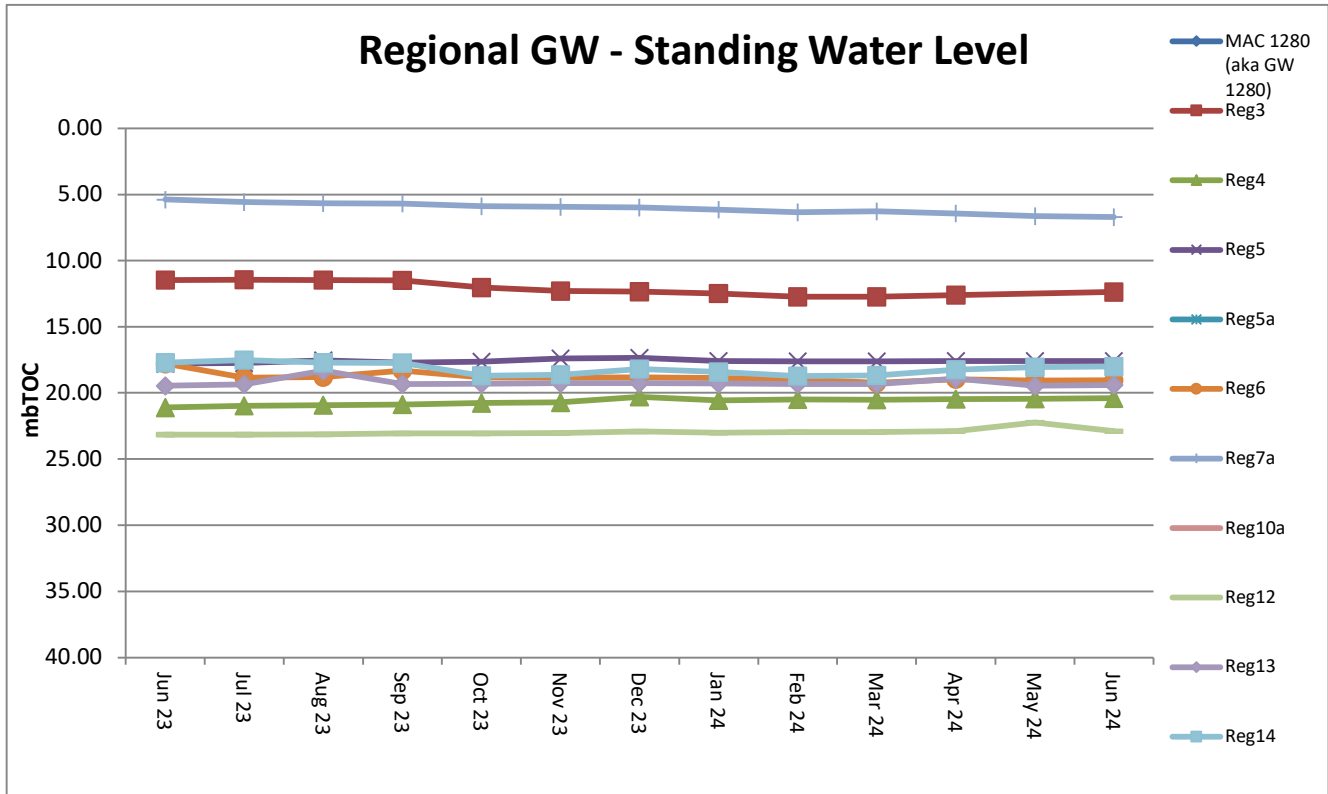
Figure 2 - TEOM Result – Particulate Matter PM₁₀ug/m³

* Blank columns indicate sample periods where there was either power outage, maintenance or other related causes.

Water Monitoring

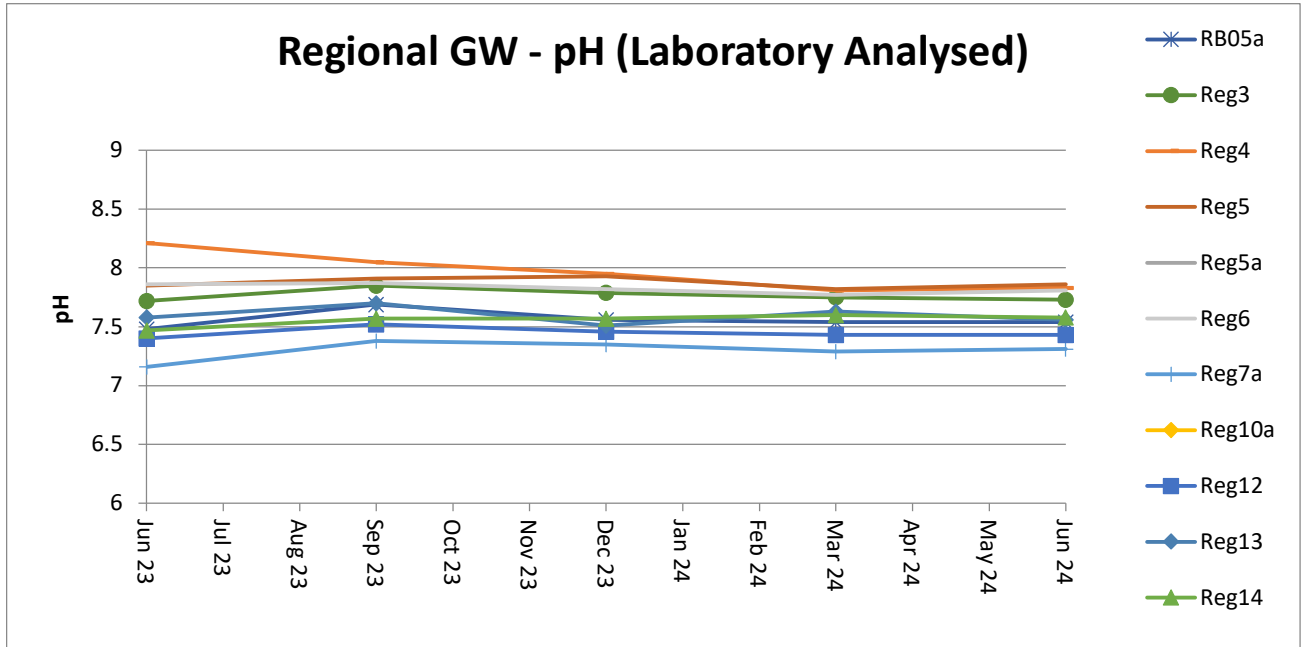
A. Groundwater

Groundwater monitoring results in open standpipe piezometers show levels to be relatively stable. The Regional bores were installed between Q4, 2013 and Q1, 2014. BCM01, BCM03, Reg10 are shallow bores which have remained dry since construction in 2013.



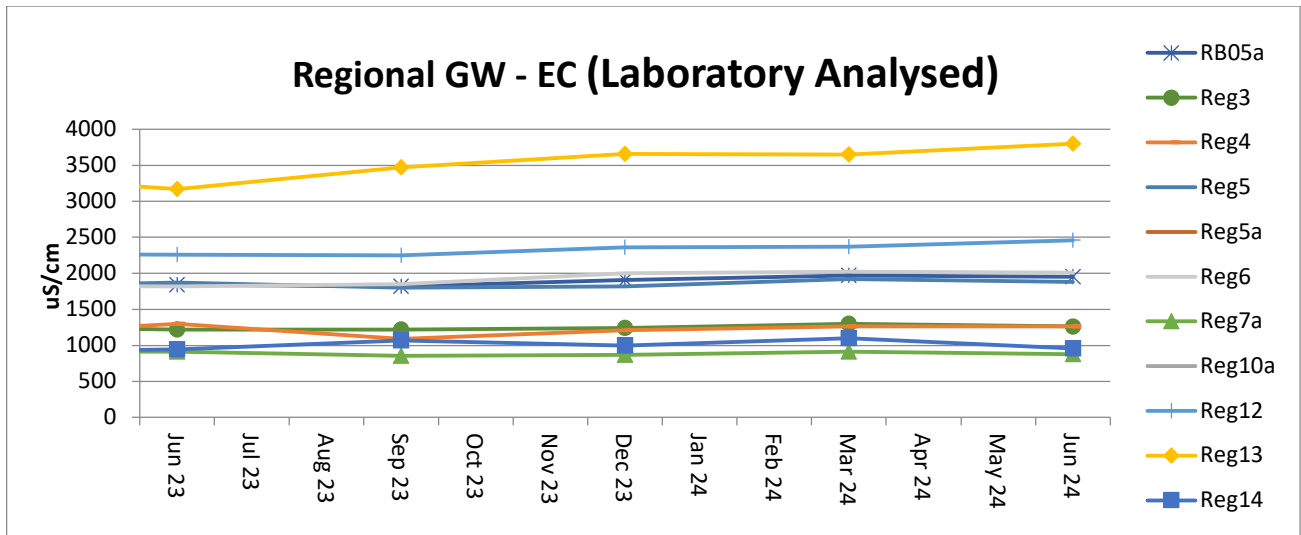
Acidity / Alkalinity (pH)

Over the past twelve months pH readings across the regional bores have remained static with very little fluctuation.



Electrical Conductivity

Laboratory Electrical Conductivity (EC) levels are all within historic groundwater EC range of 500 $\mu\text{s}/\text{cm}$ to 2,500 $\mu\text{s}/\text{cm}$, with the exception of monitoring bore Reg13 which has a historic groundwater EC range of 2,500 $\mu\text{s}/\text{cm}$ to 4,100 $\mu\text{s}/\text{cm}$. Within the last twelve months EC has remained static.

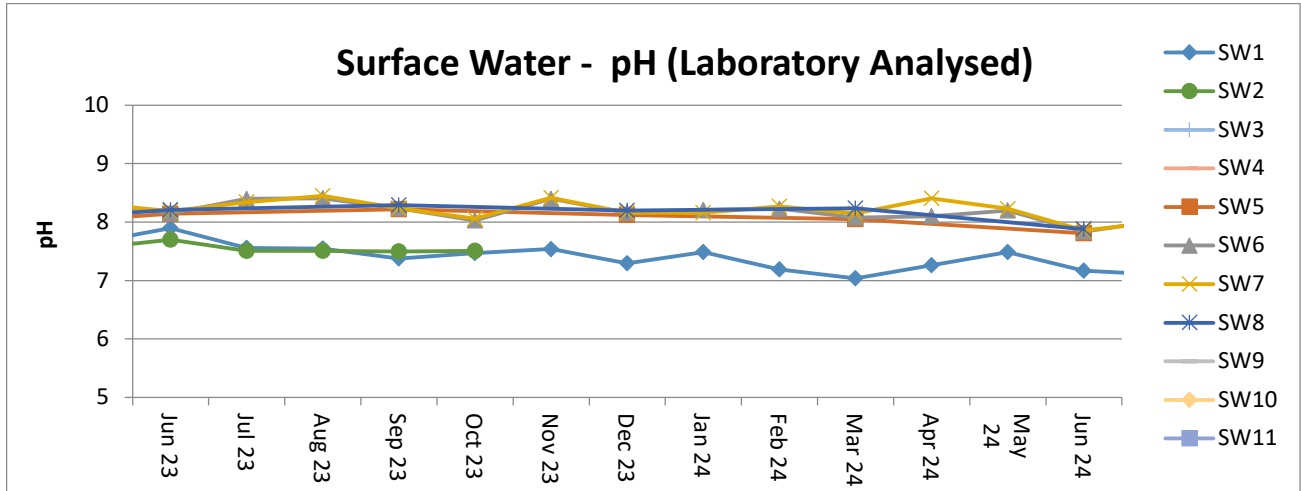


B. Surface Water – Creeks and Rivers

Routine surface water monitoring is conducted in surrounding creeks and rivers on a monthly basis. Results for parameters including pH, EC and Total Suspended Solids (TSS) are shown in the figures below.

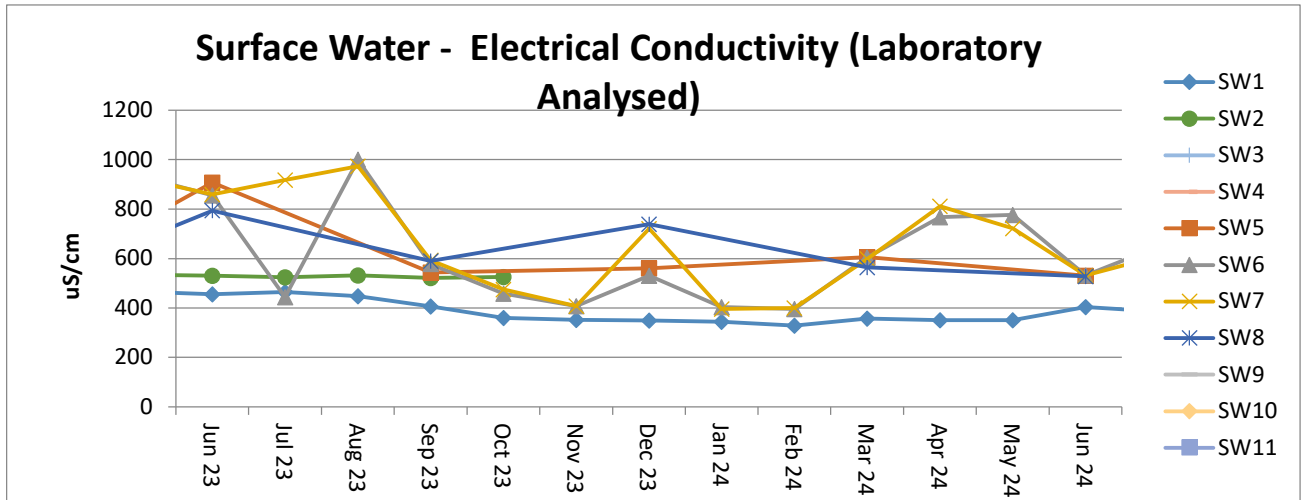
Acidity / Alkalinity (pH)

Monitoring results for pH in creeks and rivers surrounding MCCM are all trending within the ANZECC range for Irrigation, Ecosystem Health and Recreation.



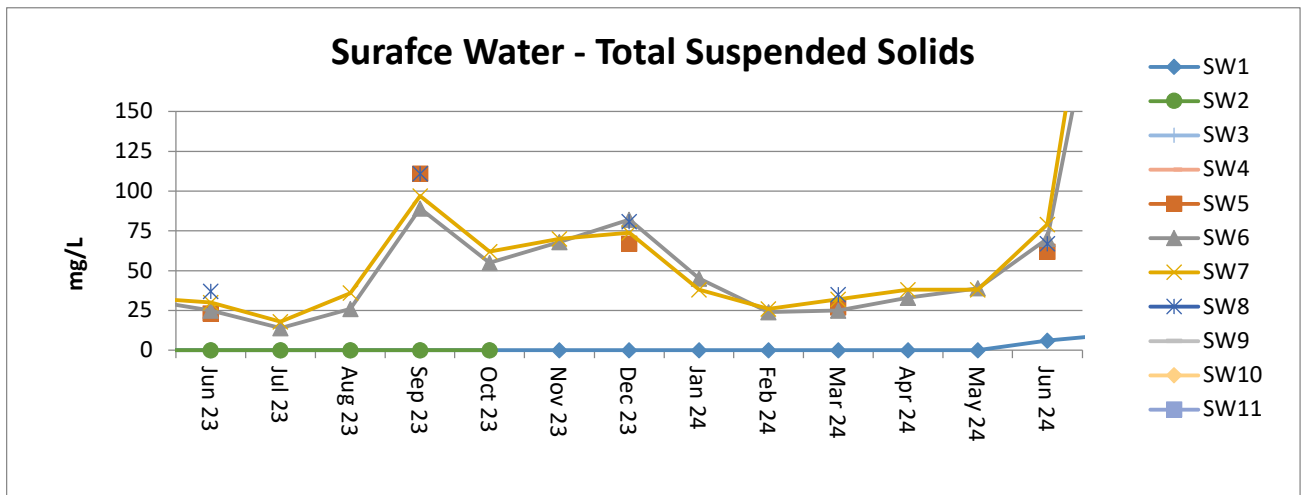
Electrical Conductivity

Surface water EC trends have remained consistent with SW5, SW6, SW7 and SW8 all historically variable. SW5, SW6, SW7 and SW8 are points along the Namoi River which are subject to regulated and variable flow regimes.



Total Suspended Solids (TSS)

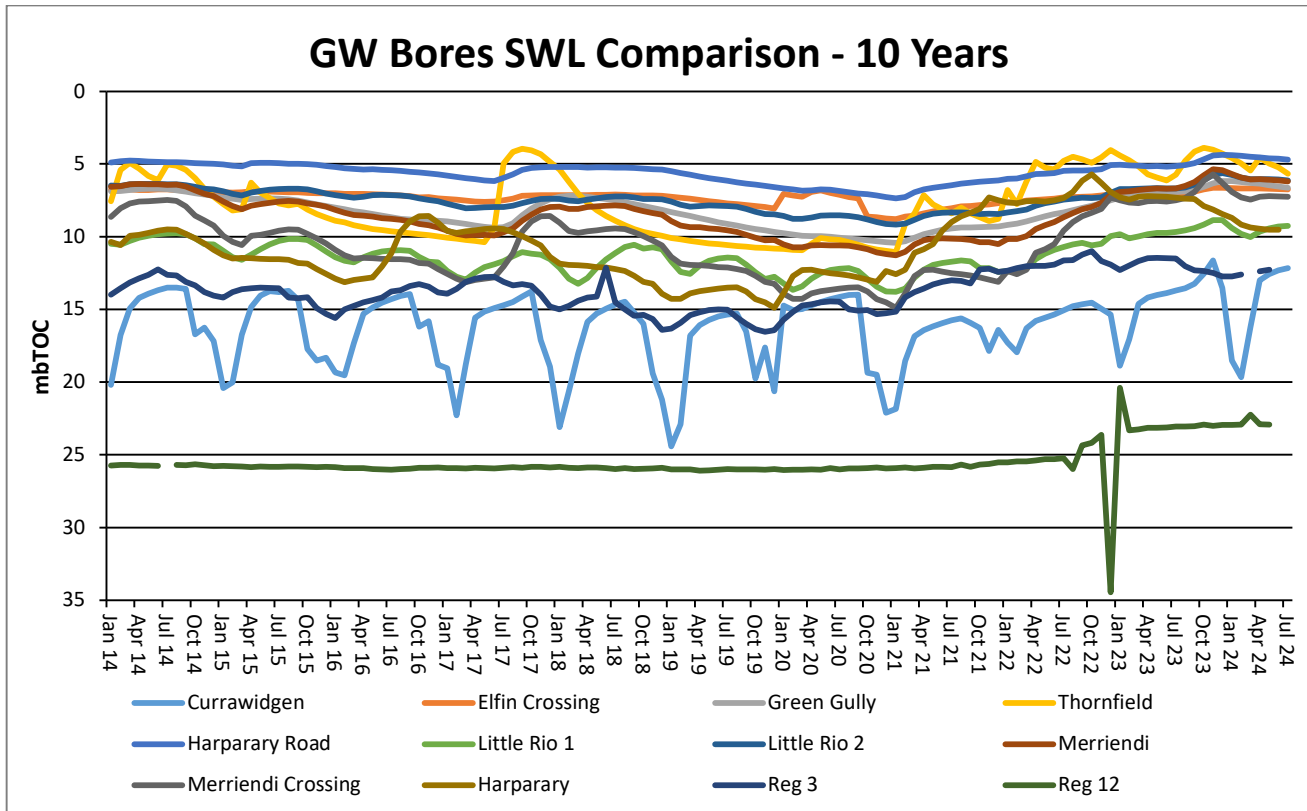
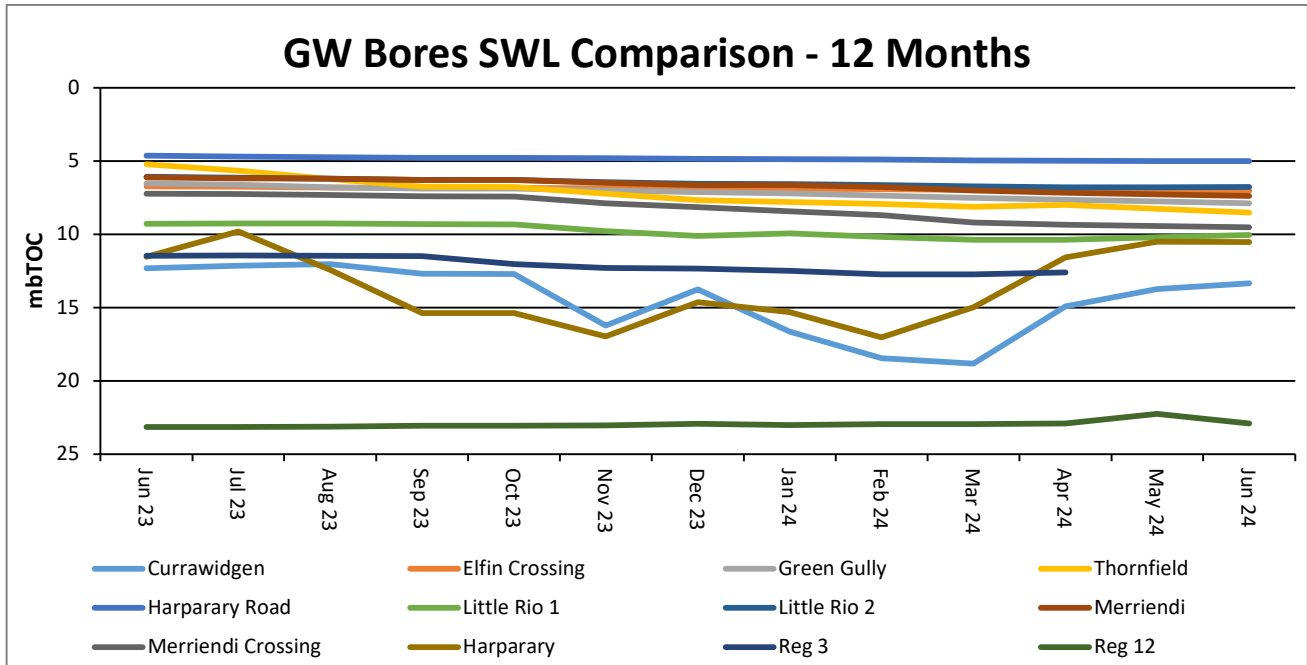
Surface water TSS trends have remained generally consistent with historical results. SW5, SW6, SW7 and SW8 are historically variable as they are located along the Namoi River which is subject to regulated and variable flow regimes.





Regional Groundwater monitoring

Maules Creek Coal Mine monitors regional bores across the region.



Rehabilitation

Progressive rehabilitation works are ongoing. MCC is on track to complete CY24 rehabilitation in accordance with the Forward Plan.

Feral Animal Management

Most recent routine Whitehaven Biodiversity Feral Animal Control program (April to June 2024) results were:

1,259 out of total 2,091 feral pigs removed were from the Maules Biodiversity properties;

566 out of the total 594 feral goats removed were from the Maules Biodiversity properties;

98 out of total 258 Canid Pest Ejectors (1080) triggered were from the Maules Biodiversity properties;

3 Deer were removed from the Maules Biodiversity properties.

Weed Control

During April to June 2024 the following weed control was undertaken via spot spraying/jetting on the Maules Biodiversity Properties:

60ha of Broadleaf weeds such as General Broadleaf, Marshmallow, Cobblers Peg and Patterson's Curse were sprayed.

4.7ha of Exotic Invasive Grasses such as African Lovegrass, Buffel Grass and Rhodes Grass were sprayed.

0.3ha of Woody Weeds such as Boxthorn & Prickly Pear were sprayed, as well as cut & paint Willow Trees and Red Berry trees.

70ha of tracks sprayed as part of the track maintenance.

Community Complaints

There was one community complaint registered during the quarter, all community complaints are available on the company website at <https://whitehavencoal.com.au/our-business/our-assets/maules-creek-mine/>

MAULES CREEK COAL MINE 2024 Community Complaints Register				
Date received	Method	Category	Nature of Complaint	MCCM Response
23/05/2024	Email	Dust	DPHI received an enquiry to the publishing of dust data for the MCCM Project.	MCC compiled the appropriate information and replied to the DPHI.

MCC CCC
meeting

Maules Creek Continuation Project

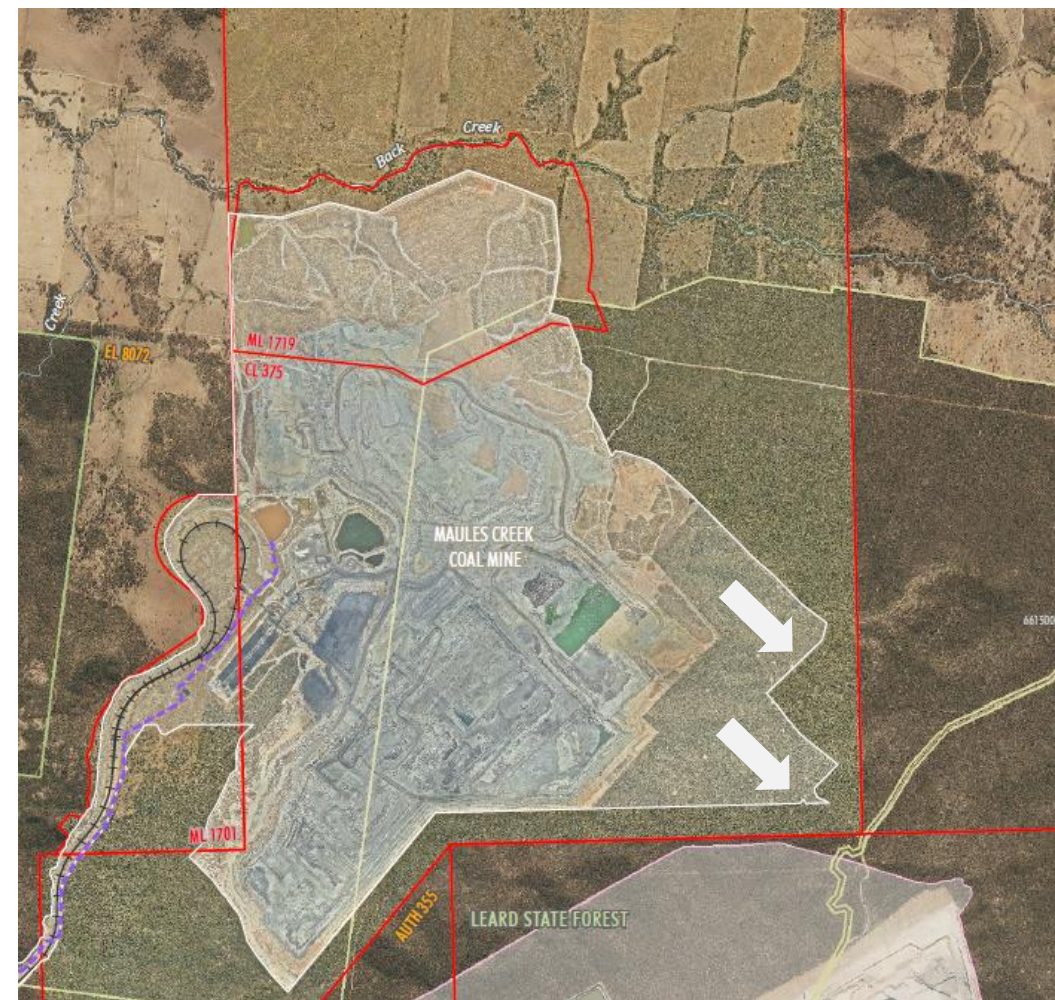
August 2024










Revegetation works in the Maules Creek Offset Areas

Maules Creek Coal Mine

- Project Approval 10_0138 for the Maules Creek Coal Project issued in 2012
- The MCCM is approved to extract up to 13 Mtpa of ROM until 31 December 2034
- Open cut mining operations are currently progressing in a south-east direction towards the approved extent of disturbance
- Whitehaven holds tenements over the area to the east of the approved operations within the Leard State Forest

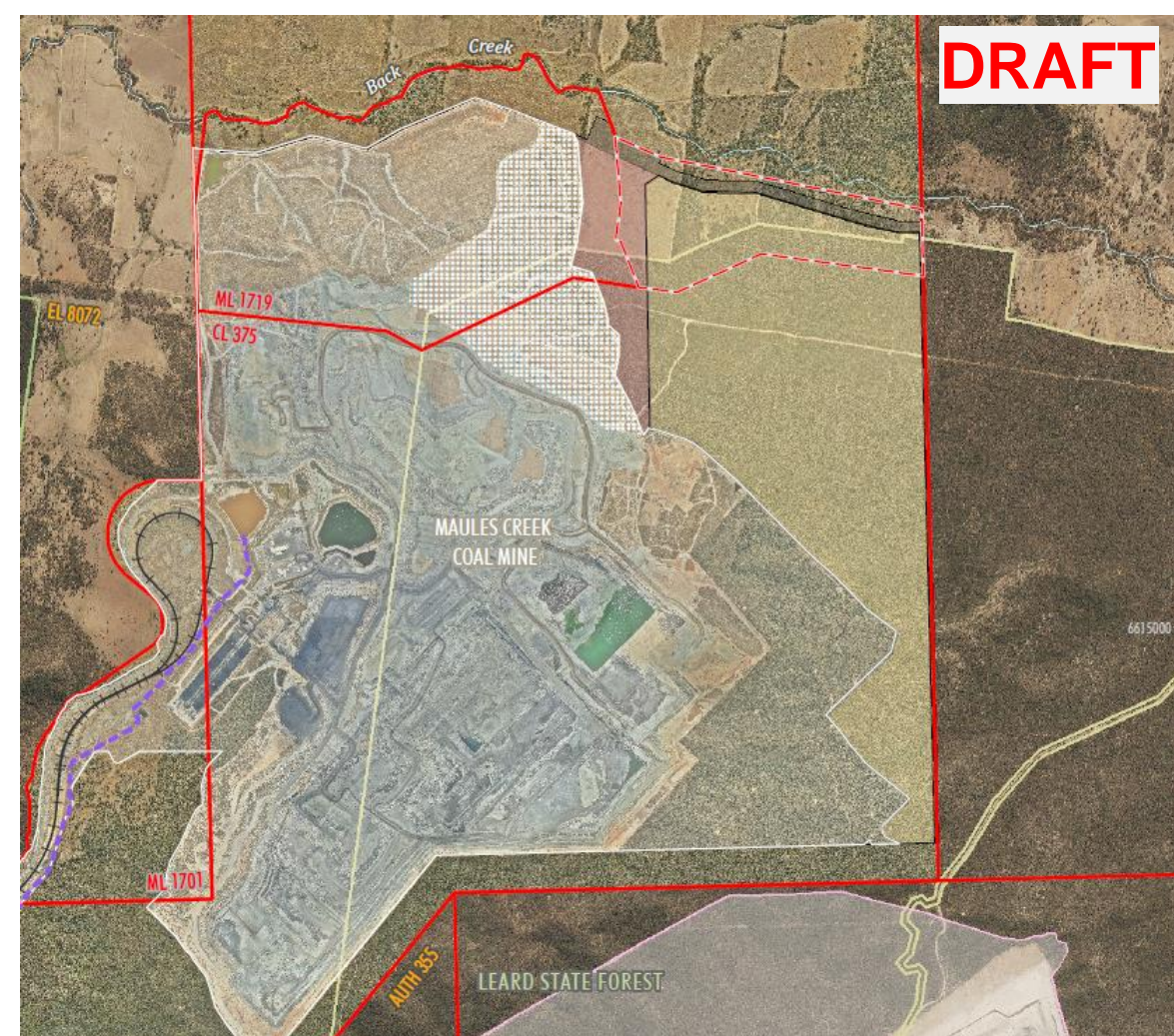


LEGEND

	Mining Tenement Boundary (ML and CL)		MCCM Approximate Extent of Existing/Approved Surface Development (EPBC 2010/5566)
	State Conservation Area, Aboriginal Area		MCCM Water Supply Pipeline
	State Forest		BCM Approximate Extent of Existing/Approved Surface Development
	Rail Line		

MCCP Project Description

- Continuation of open cut mining operations and workforce beyond 2034 to approximately 2045
- Up to 14 Mtpa of ROM coal (1 Mtpa increase to approved maximum ROM)
- Transport of up to 12.4 Mtpa of product coal (no change to approved maximum rail limit)
- Continued operation of the existing CHPP, rail and other MCCM infrastructure (with upgrades as required) until 2045
- Final void to be located in the south-east away from Back Creek
- Surface-rights mining lease to be sought in the north of extension area
- Water transfer pipeline to be constructed between MCCM water transfer pipeline network and approved Tarrawonga Coal Mine/Vickery Extension Project (see next slide)
- Continued employment opportunity

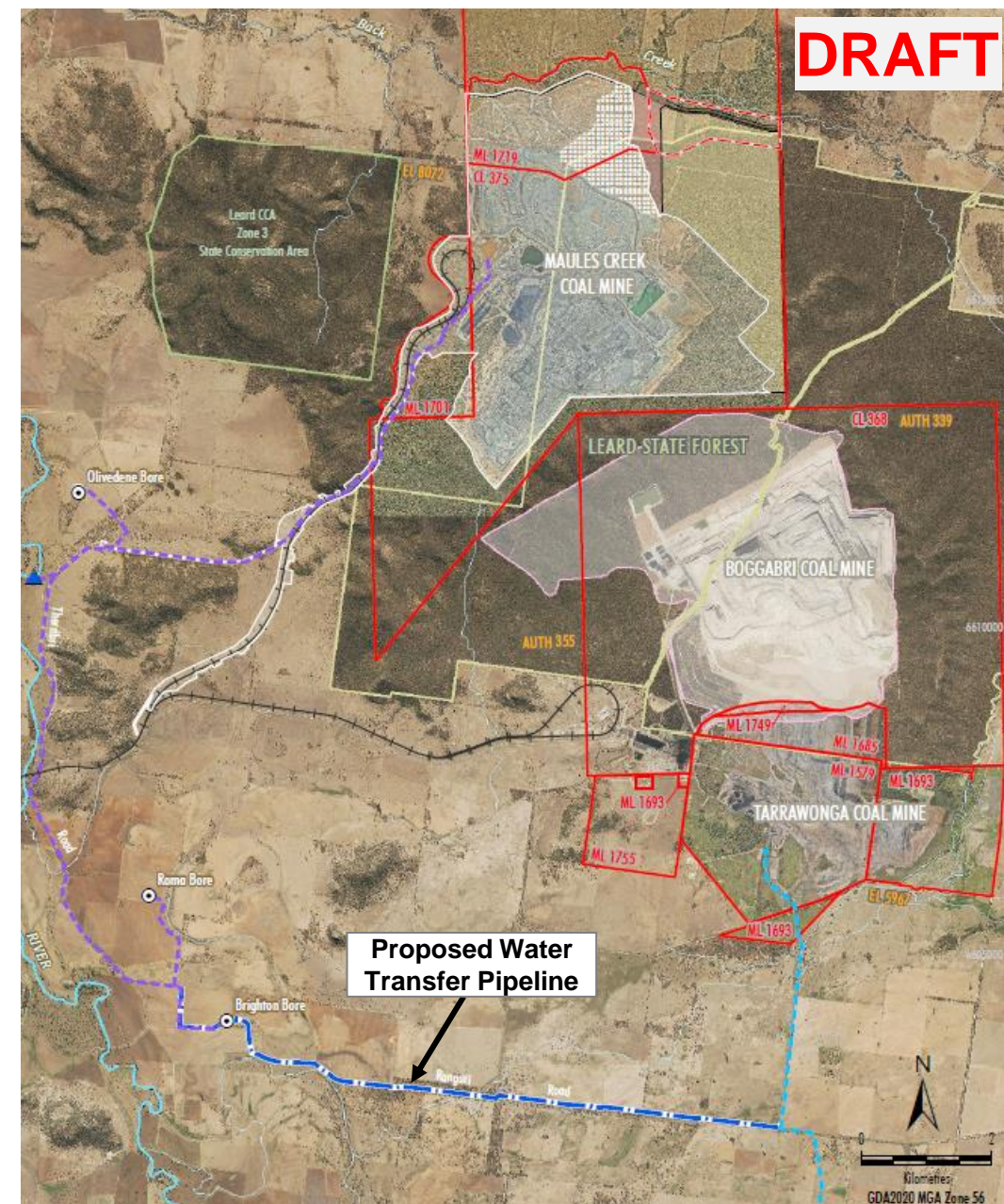
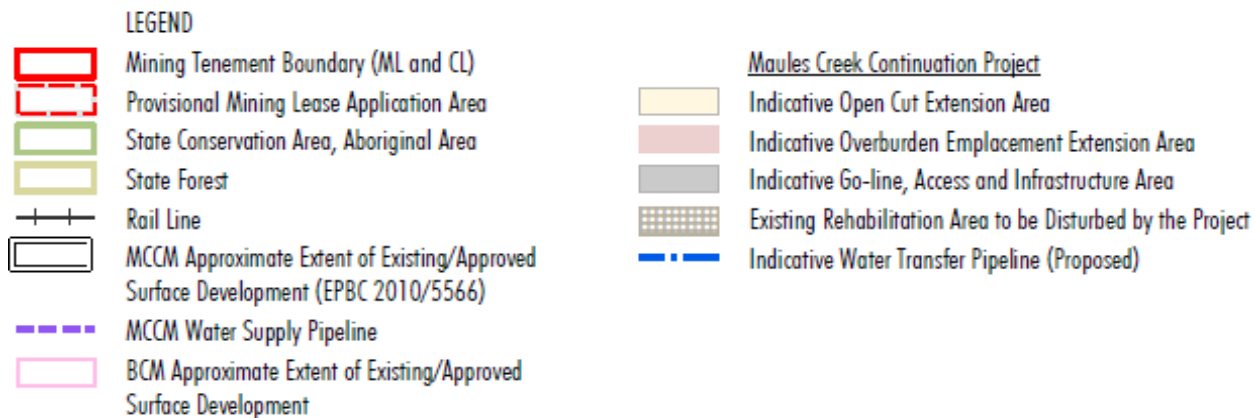


LEGEND

	Mining Tenement Boundary (ML and CL)		Indicative Open Cut Extension Area
	Provisional Mining Lease Application Area		Indicative Overburden Emplacement Extension Area
	State Conservation Area, Aboriginal Area		Indicative Go-line, Access and Infrastructure Area
	State Forest		Existing Rehabilitation Area to be Disturbed by the Project
	Rail Line		
	MCCM Approximate Extent of Existing/Approved Surface Development (EPBC 2010/5566)		
	MCCM Water Supply Pipeline		
	BCM Approximate Extent of Existing/Approved Surface Development		

MCCCP Project Description

- Water transfer pipeline to be constructed between MCCM water transfer pipeline network and approved Tarrawonga Coal Mine/Vickery Extension Project
- Pipeline to enable water sharing efficiencies with the other mining operations during dry and wet conditions









Specialist Studies

- Surface Water Assessment
- Groundwater Assessment
- Flora and Fauna assessments – Biodiversity Development Assessment Report
- Aquatic Ecology
- Social Impact Assessment
- Aboriginal Cultural Heritage
- Non-Aboriginal Cultural Heritage
- Noise Assessment
- Air Quality
- Greenhouse Gas Assessment
- Economic
- BSAL Assessment (SVC)
- Soil and Land Resource Assessment
- Land Contamination Assessment
- Transport Assessment
- Geochemistry
- Environmental Risk
- Visual Assessment
- Blasting Assessment

Biodiversity

- Terrestrial and aquatic ecology surveys commenced in late 2022 continuing to late 2024
- A broad study area extending into Leard State Forest as well as along the proposed water supply pipeline
- Existing information from years of surveys for local mines and offset area surveys and monitoring
- Surveys under the NSW BC Act and/or Commonwealth EPBC Act during the required survey time in accordance with the BAM.
- Bilateral Commonwealth assessment with NSW State Significant Development process

Component	Specialist
BDAR	Premise (Sally Kirby, Experienced Accredited Assessor)  Premise
Flora Survey and Mapping	Premise  Premise
Fauna Surveys	Ausecology 
Fauna Drone Surveys	RipperCorp 
Peer Review	AMBS Ecology and Heritage 
Aquatic Ecology Assessment	Eco Logical 

Surface Water

- Surface Water Assessment is being undertaken by WRM Water & Environment:
 - Site Water Balance to assess water supply requirements and site water inventory for the Project (including with the proposed water transfer pipeline)
 - Back Creek flood modelling and assessment
 - Assessment of final void water level behaviour
 - WMP water management system objectives included
 - WRM to recommend water management measures and monitoring for the MCCM incorporating the Project

Noise

- Noise and Blasting Impact Assessment being undertaken by RWDI
- Assessment to be conducted in accordance with *Noise Policy for Industry* and other guidelines prescribed in the SEARs
- Predictive noise modelling of representative Project years (e.g. early, mid and late Project)
 - Numerical model to be used to predict Project noise levels
 - Project-only and cumulative assessments for individual dwellings
 - Vacant land noise assessment
 - Modelling to inform management and mitigation measures to be implemented for the Project
- Blasting assessment to be undertaken
- Road transport noise assessment
- Rail noise assessment (note: no increase in product coal is proposed under the Project)
- Peer review of Noise and Blasting Assessment to be completed by SLR



Department of Planning and Environment

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*

4. Noise and Blasting

- An assessment of the likely construction, operational and traffic noise impacts of the development, in accordance with the *Construction Noise Guideline* (if finalised) or the *Interim Construction Noise Guideline*, the *NSW Noise Policy for Industry* (EPA) and the *NSW Road Noise Policy*, and having regard to the *Voluntary Land Acquisition and Mitigation Policy*.
- An assessment of the likely blasting impacts of the development on people, animals, buildings/structures and infrastructure, and significant natural features, having regard to the relevant ANZECC guidelines.

Air Quality

- Air Quality Assessment being undertaken by Todoroski Air Sciences
- Assessment to be conducted in accordance with *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* and other guidelines prescribed in the SEARs
- Predictive air quality modelling of representative Project years (e.g. early, mid and late Project)
 - Numerical model to be used to predict Project air quality impacts
 - Project-only and cumulative assessments for individual dwellings
 - Modelling to inform management and mitigation measures to be implemented for the Project
- Blast fume assessment
- Peer review of Air Quality Assessment to be completed by Katestone



Department of Planning and Environment

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*

3. Air Quality

- An assessment of the likely air quality impacts of the development, including cumulative impacts from nearby developments, in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (2016) (or its latest version) and having regard to the NSW Government's *Voluntary Land Acquisition and Mitigation Policy*.
- The ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations Act 1997* and the *Protection of the Environment Operations (Clean Air) Regulation 2010*.

EIS Approval Process

- Scoping Report lodgment - **Complete**
- Secretary's Environmental Assessment Requirements (SEARs) issued by DPHI on 26 October 2023 - **Complete**
- Site Verification Certificate granted over the proposed Mining Lease Application area - **Complete**
- EPBC Referral lodged on 15 July 2024 (currently being exhibited)
- EIS planned to be lodged in Q1 2025
- Department of Planning, Housing and Infrastructure to arrange for the EIS to be publicly exhibited Q2, 2025

APPROVAL TIMELINE

Preparation of Scoping Report



Lodgement of Scoping Report



SEARs issued from the DPHI



EIS development

**WE ARE
HERE**

Development Application, including the EIS, lodged with DPHI

DPHI reviews the EIS and prepares for public exhibition

EIS placed on public exhibition for comment

Whitehaven responds to submissions

DPHI assesses the EIS, submissions and Whitehaven responses

The NSW Minister for Planning directs IPC to undertake an Independent Assessment

The IPC makes a determination

Thank You



Revegetation works in the Maules Creek Offset Areas.

Maules Creek Continuation Project EIS



Australasian
Groundwater
& Environmental
Consultants

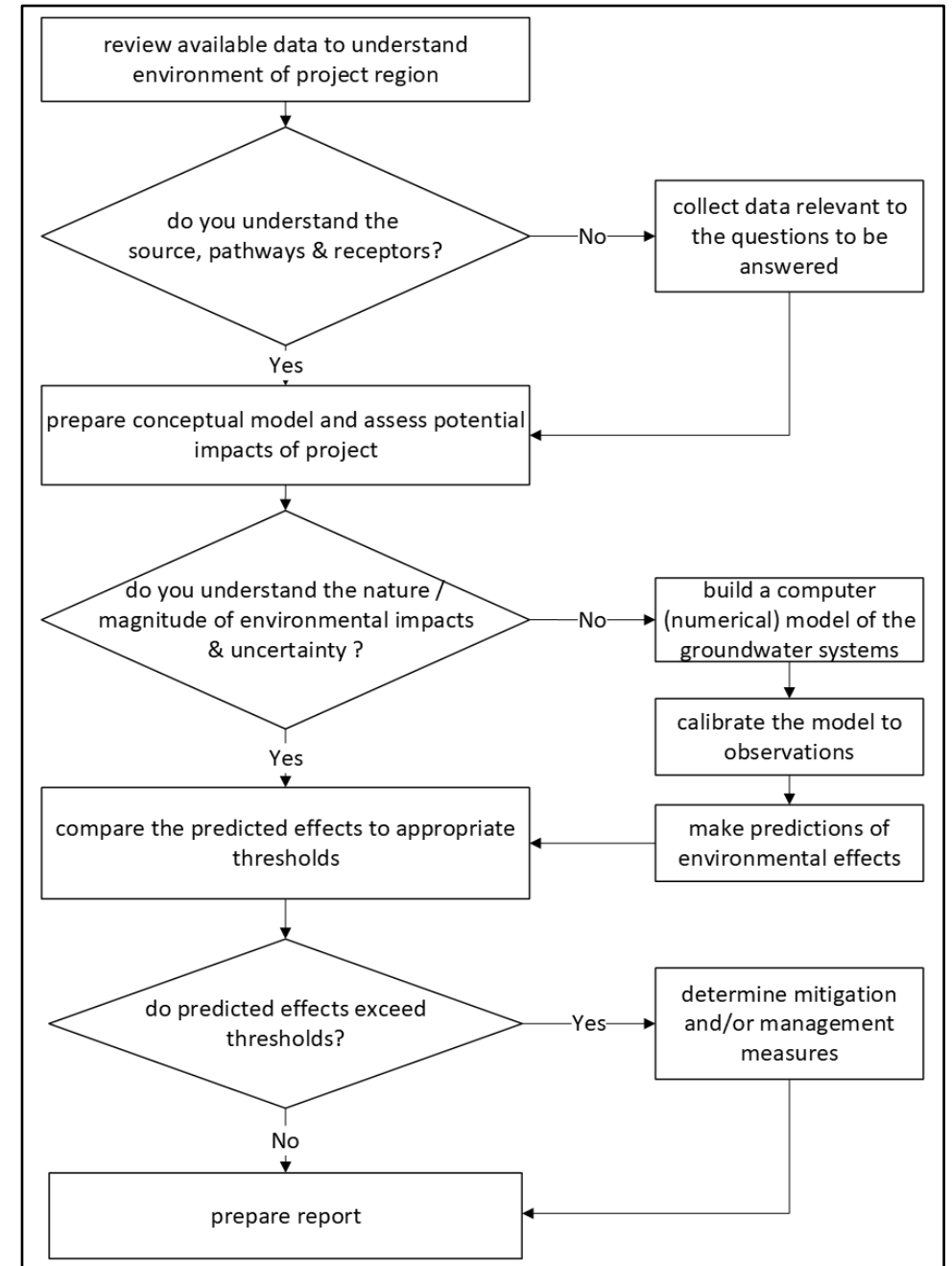
CCC – Groundwater
28 August 2024



Groundwater Assessment

- Groundwater Assessment being prepared by AGE in accordance with contemporary guidelines
- AGE's 2019 Boggabri-Tarrawonga-Maules (BTM) groundwater model being updated, and impact assessment completed as per the process shown
- Model update being undertaken with input from the NSW Government (DCCEEW-water) and external peer reviewer

Figure: Groundwater Modelling and Assessment Process

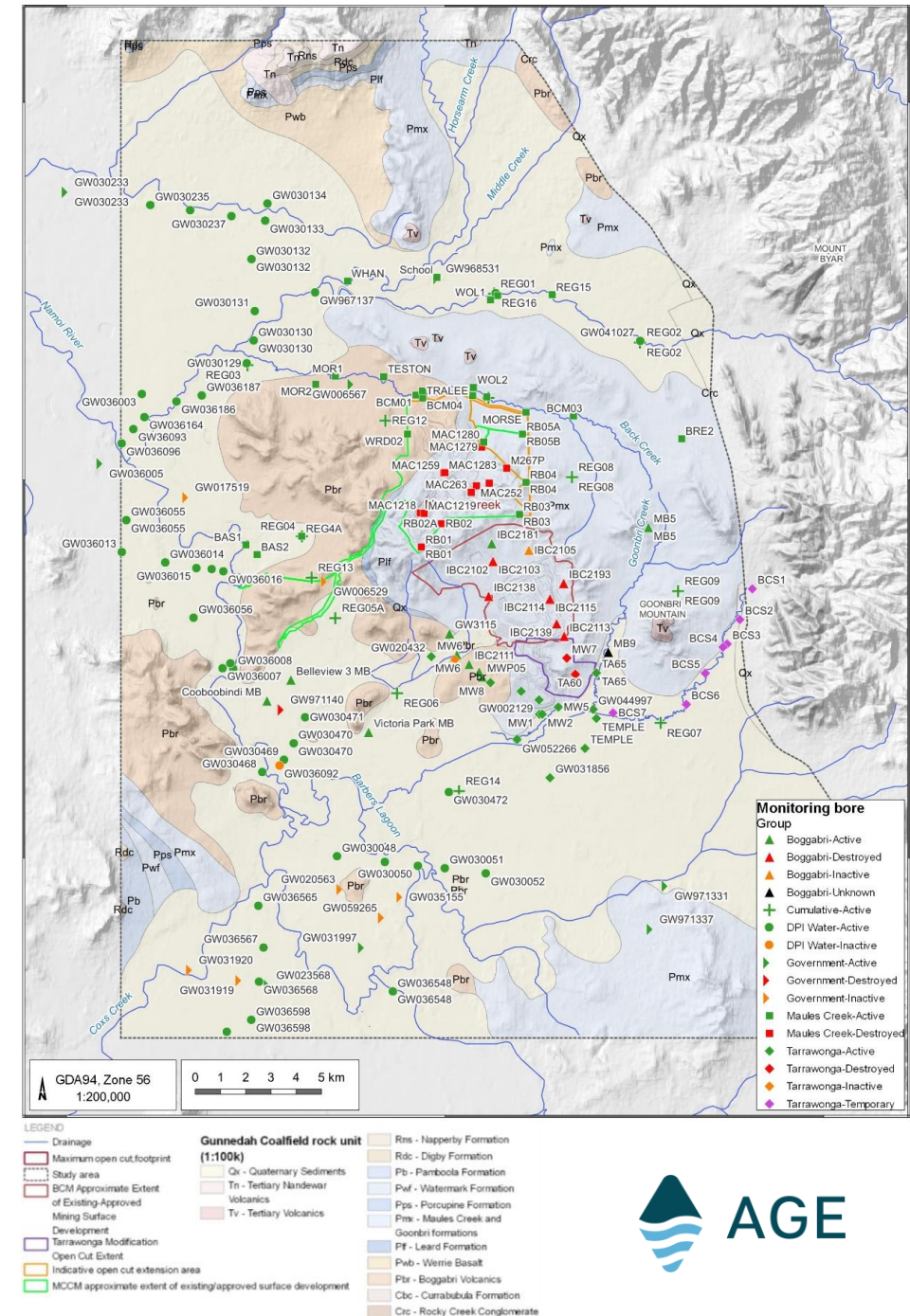


Step 1: Data Review

Review available data to understand environment of project region:

- Substantial data in the public domain, including:
 - NSW Government bores;
 - University of NSW bores;
 - Mine-owned bores; and
 - Privately-owned bores.
- Data reviewed to confirm understanding of potential Sources, Pathways and Receptors

Figure: Regional Groundwater Monitoring Network

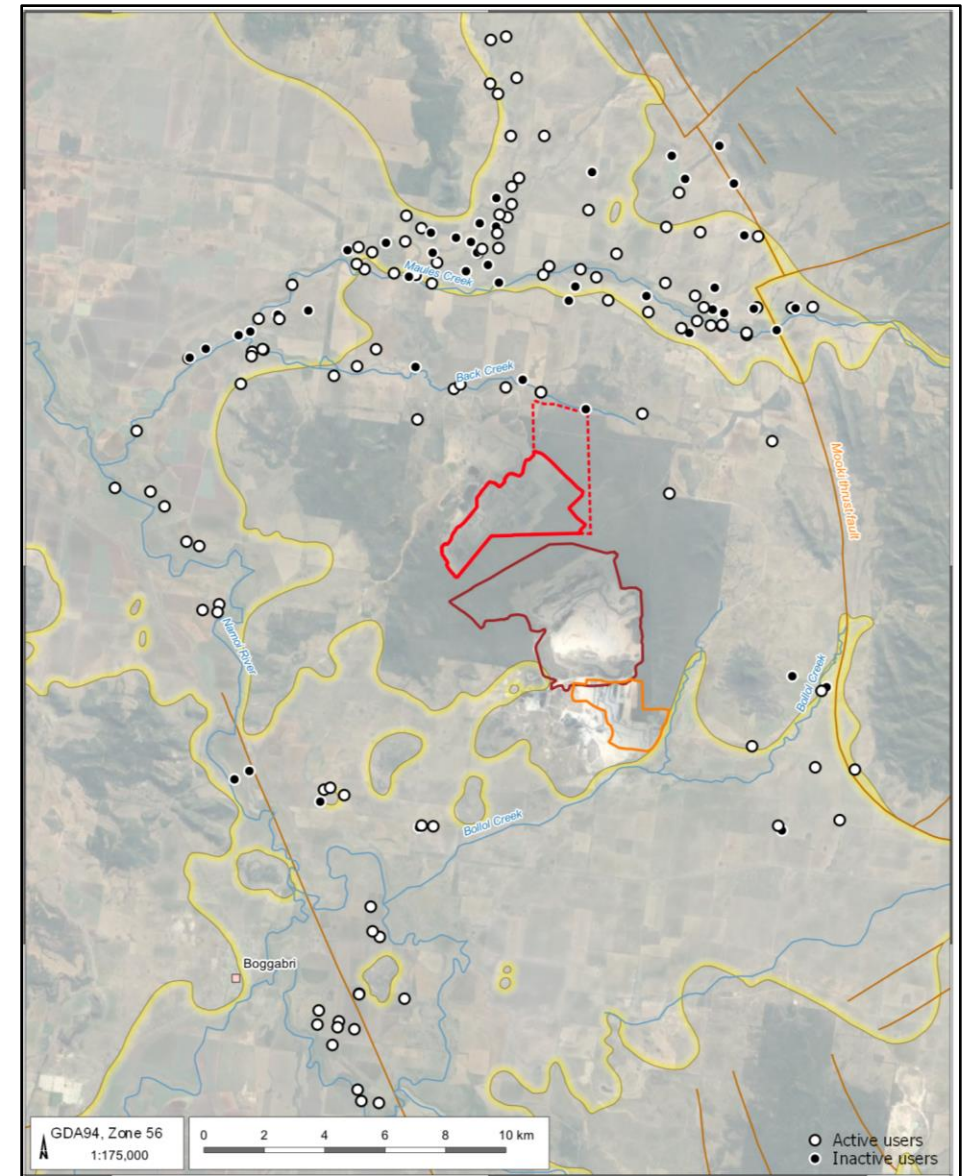


Step 2: Data Collection

Collect data relevant to the questions to be answered:

- Bore census conducted in ~13km radius of the BTM (190 bores total)
- Additional groundwater monitoring bores installed along Back Creek
- Additional groundwater monitoring equipment being installed between Back Creek and Maules Creek
- Groundwater imaging surveys along Back Creek and between Back Creek and Maules Creek

Figure: Bore Inspected During Bore Census



LEGEND

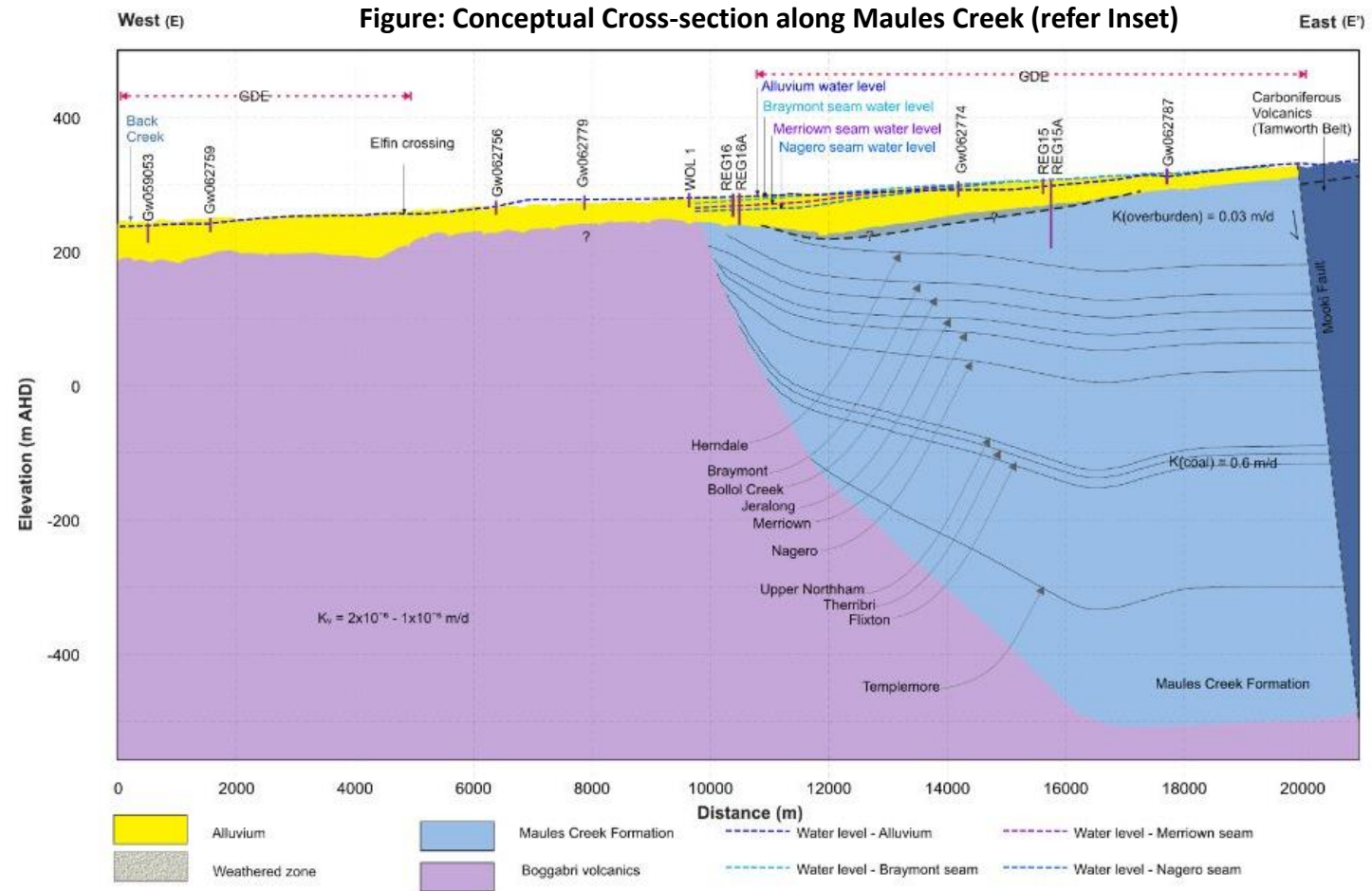
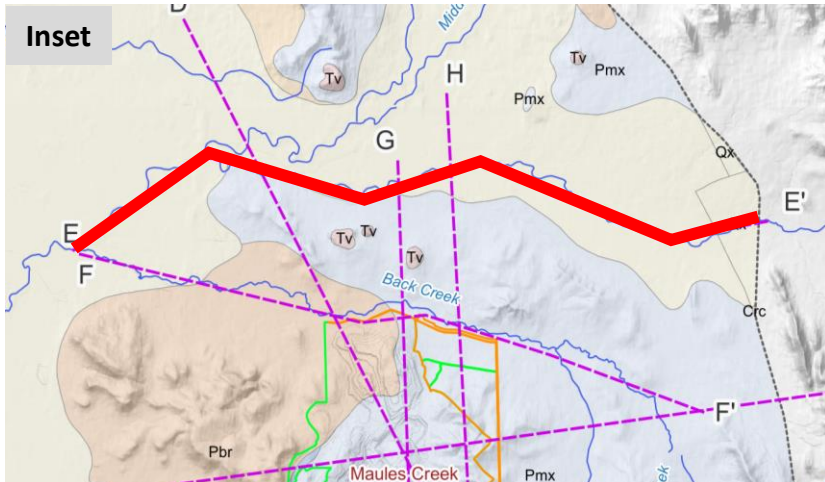
- Populated place
- Major drainage
- MCGM Continuation Project open cut extent
- MCGM approved open cut extent
- Tarrawonga modification open cut extent
- BCM approximate existing extent

- Quaternary Sediments
- Regional Fault
- Active users
- Inactive users

Step 3: Conceptual Model

Prepare conceptual model and assess potential impacts of project:

- Describes how the groundwater system operates based on the available information, including:
 - Where recharge occurs;
 - Where water flows;
 - Where discharge occurs; and
 - Potential receptors reliant on the groundwater system.

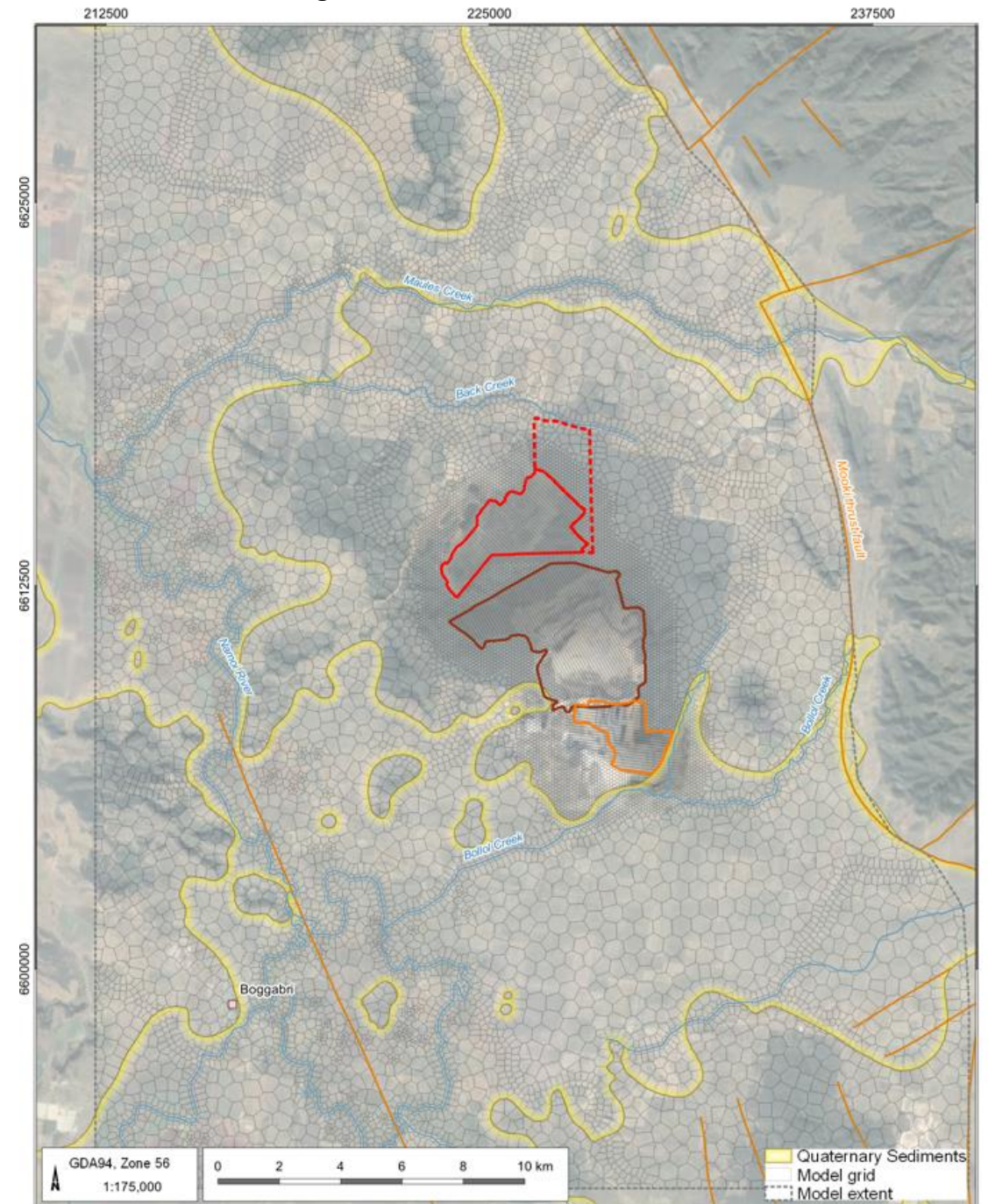


Step 4: Numerical Modelling

Build a computer (numerical) model of the groundwater systems, calibrate the model to observations, and make predictions of environmental effects:

- Groundwater model is being calibrated using the information gathered and processed in Steps 1 and 2
- AGE/Whitehaven have consulted with the NSW government to obtain feedback on:
 - Proposed groundwater modelling approach;
 - Groundwater conceptual model; and
 - Groundwater numerical model calibration.

Figure: Groundwater Model

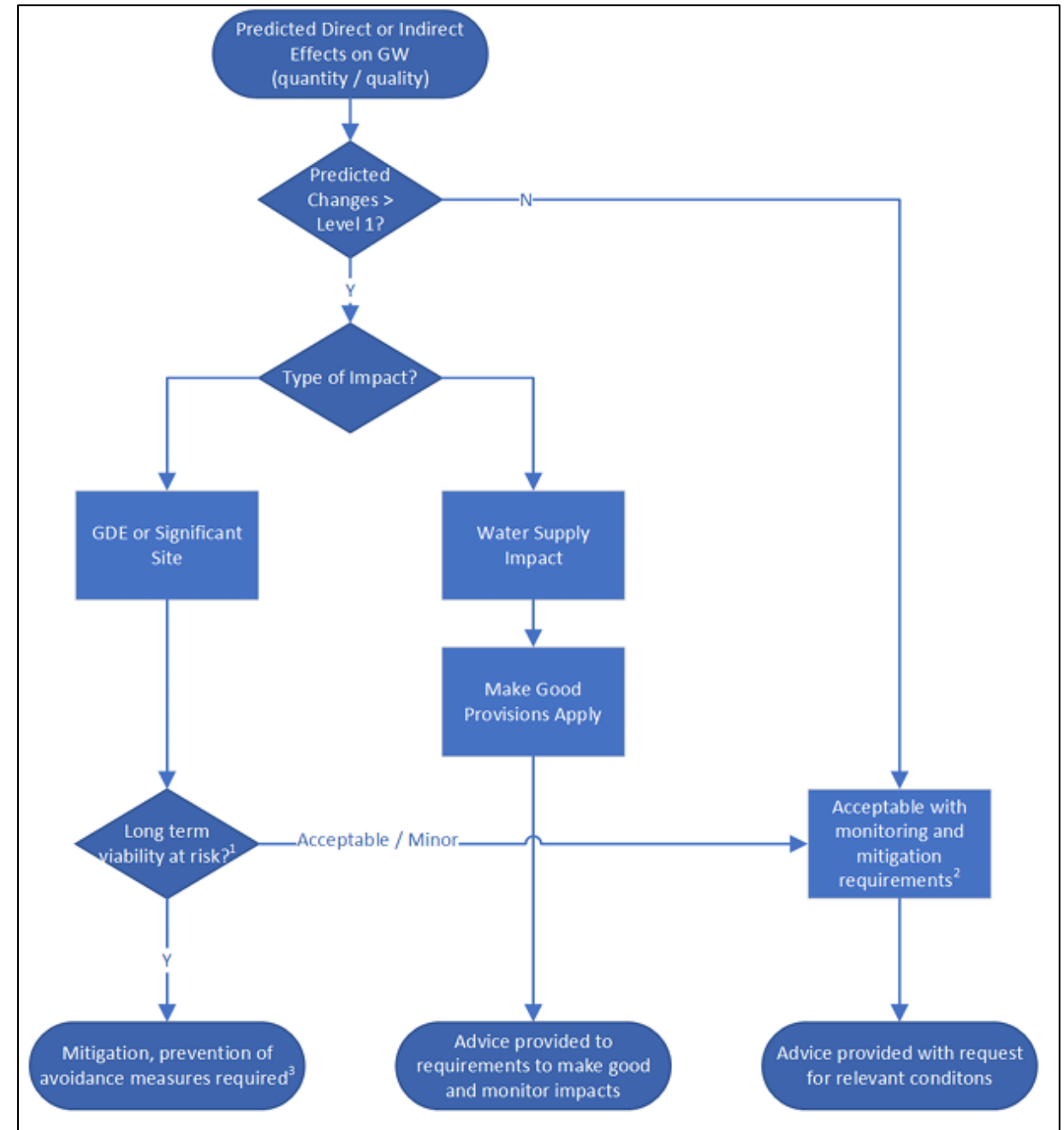


Step 5: Impact Assessment

Compare the predicted effects to appropriate thresholds:

- The NSW Aquifer Interference Policy (AIP) provides the “Minimal Impact Considerations”
- This flow chart identifies the process to comparing model predictions to the AIP thresholds
- Make good provisions apply for private bores impacted above Level 1
- Potential long-term risks to groundwater dependent vegetation need to be recognised, and mitigation, prevention and avoidance measures should be considered

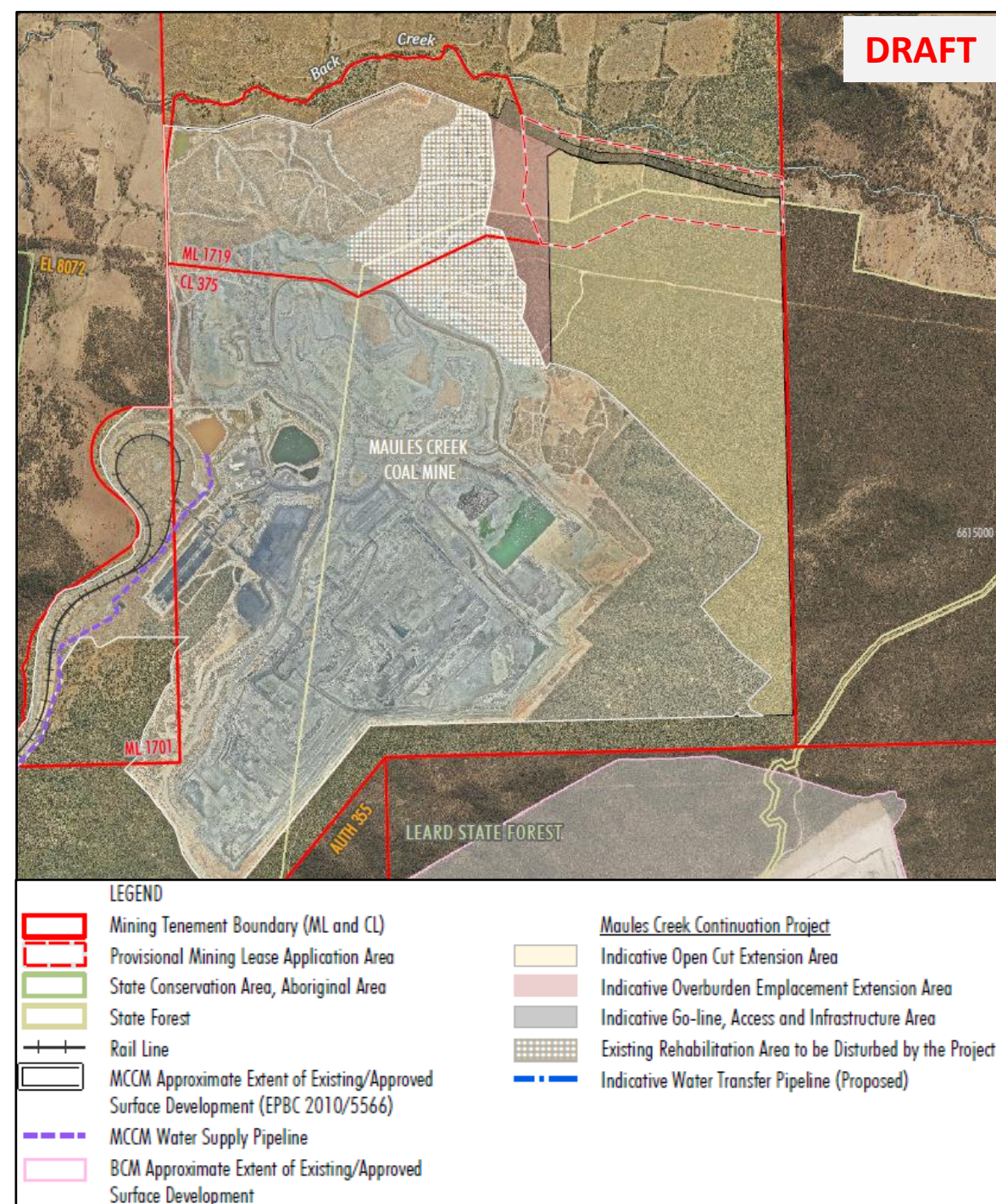
Figure: Aquifer Interference Policy Assessment Process



Step 6: Reporting

Prepare report:

- The assessment report will include:
 - Description of current groundwater system;
 - Groundwater modelling methodology;
 - Groundwater modelling predictions;
 - Groundwater impact assessment; and
 - Recommended mitigation measures and monitoring.



Thank you



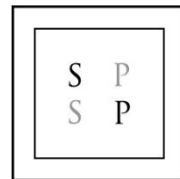
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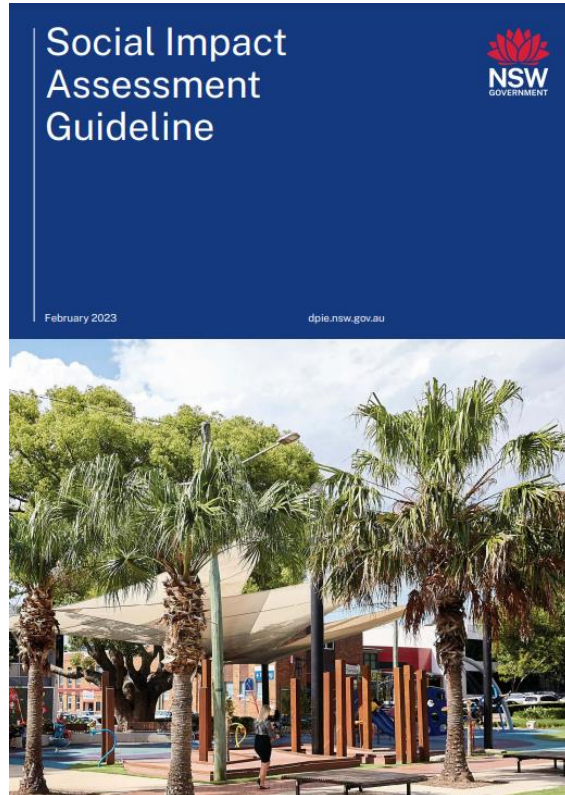
SOCIAL IMPACT ASSESSMENT

For the Maules Creek Continuation Project
Social Impact Management Measures - August 2024



SQUARE PEG
SOCIAL PERFORMANCE

SOCIAL IMPACTS ARE THE CONSEQUENCES PEOPLE EXPERIENCE WHEN A NEW PROJECT BRINGS CHANGE

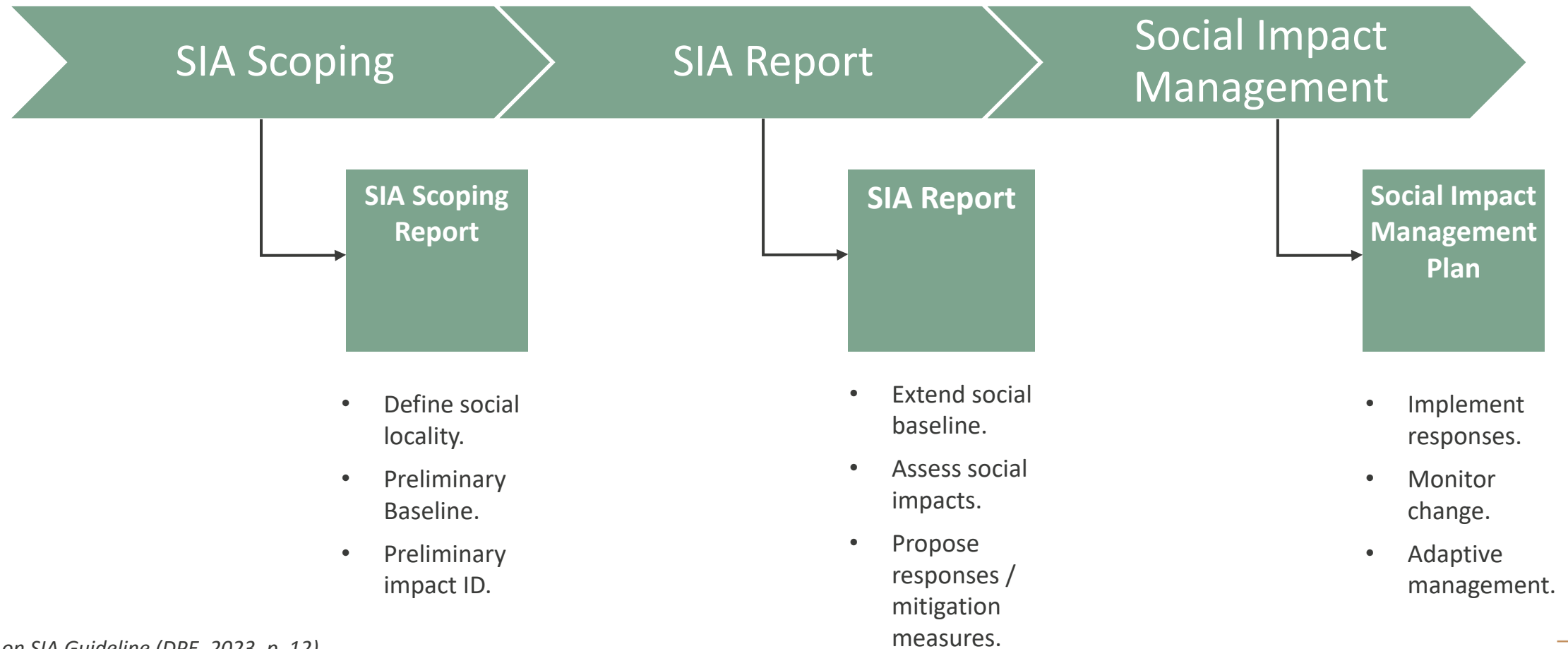


Source: From DPE SIA Guideline

Figure 1: Social elements of value to people

*SIA puts **people** and their experience of **change** at the centre of the assessment.*

THERE ARE THREE PHASES IN THE SIA PROCESS



PRELIMINARY IMPACT IDENTIFICATION – SHOULD THE PROJECT PROCEED



- Continued opportunities for businesses to supply goods or services to the Project, thus contributing to a diversified and resilient business community.
- Continued provision of employment opportunities for residents, thus contributing to socio-economic wellbeing.



- Continued contribution to population stability or growth in the region.
- Continued contribution to the vitality of community groups.



- Potential for population reduction in Maules Creek.
- Potential for impact to community cohesion in Maules Creek.



- Continued contribution to pressure on the housing market, affecting people needing affordable housing.



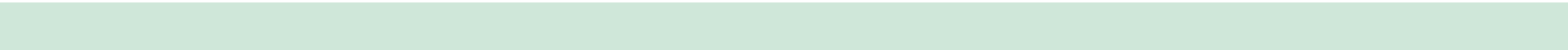
- Potential disturbance to cultural heritage sites.



- Continued noise, dust, lighting and operational impacts affecting the quality of life of nearby landholders.
- Visual disturbance for nearby landholders, affecting their sense of place.
- Concern around groundwater impact.



PROPOSED SOCIAL IMPACT MANAGEMENT FRAMEWORK



THERE ARE MULTIPLE INITIATIVES, STRATEGIES AND PLANS WHICH CONTRIBUTE TO MANAGING SOCIAL IMPACT



Maules Creek Coal Mine Social Impact Management Plan

Whitehaven Community Investment Strategy

Whitehaven Reconciliation Action Plan

Planning agreement

Environmental Management Plans

Cultural Heritage Management Plan

Traffic Management Plan

Decorative orange lines in the top-left corner.

OVERALL RECOMMENDATION:

WHITEHAVEN REVIEWS AND UPDATES MCCM SIMP CONSIDERING ACTIONS ACROSS SIX THEMES

Economic
development

Community
development

Housing and
accommodation

Land and water
management

Planning for a
future beyond
closure

Communication
and
engagement

Decorative orange lines in the bottom-right corner.

ECONOMIC DEVELOPMENT

Mitigation / Enhancement Measure	Proposed Indicators	Impacts
<p>Continue to implement strategies to attract and retain local residents, Indigenous people and females to the MCCM workforce, including:</p> <ul style="list-style-type: none"> • advertising employment opportunities locally; • providing an operator trainee program; • delivering apprenticeships; • engaging with local schools, providing, as examples, site visits, career talks, etc; and • share workforce performance data in Annual Reviews and with the MCCM CCC 	<p>Number and percentage of local residents, Indigenous people and females in workforce.</p>	<p>Continued provision of employment opportunities for residents, thus contributing to socio-economic wellbeing.</p> <p>Continued contribution to population stability or growth in the region.</p>
<p>Develop and implement a pre-employment program (or similar) to encourage employment of residents who may be experiencing disadvantage, including Aboriginal and Torres Strait Islander people.</p>	<p>Number of program participants gaining employment with Whitehaven.</p>	<p>Continued opportunities for businesses to supply goods or services to the Project, thus contributing to a diversified and resilient business community.</p>
<p>Continue to implement strategies to maximise participation of local, regional and Indigenous businesses, including, as examples:</p> <ul style="list-style-type: none"> • maintaining a database of local, regional and Indigenous suppliers; • engaging frequently with the Narrabri, Boggabri and Gunnedah Business Chambers; • develop and implement programs to support capability building for local, regional and Indigenous businesses; • prioritise engagement of local, regional and Indigenous businesses; and • share performance data in Annual Reviews and with the MCCM CCC. 	<p>Number of local and Indigenous businesses supplying to Project.</p> <p>Spend with local and Indigenous businesses.</p>	

COMMUNITY DEVELOPMENT

Mitigation / Enhancement Measure	Proposed Indicators	Impacts
Continue to support workforce attraction and skills development initiatives for early learning and / or community services , including as examples: <ul style="list-style-type: none"> • providing grants for professional development; • funding traineeships; and • consider funding relocation incentives for early learning or community services workers. 	Number of persons supported with upskilling.	Continued contribution to the vitality of community groups.
Continue to provide community investment to support community organisations , including service providers, including as examples: <ul style="list-style-type: none"> • implementing a mix of smaller scale sponsorships and larger scale, longer term partnerships; • support events and projects that contribute to community cohesion and community life, including in Maules Creek. 	Number of organisations supported. Community investment spend.	Continued contribution to population stability or growth in the region.
In the SIMP review, evaluate the geographic and thematic distribution of proposed funds and initiatives	Community support for refreshed community investment strategy.	Potential for population reduction in Maules Creek.
Together with the Maules Creek community, co-develop methods to seek to stem population decline , including as examples: <ul style="list-style-type: none"> • conduct joint inspections with community members of Whitehaven-owned housing to determine suitability for occupation; • seek to lease out Whitehaven-owned housing in a way that encourages families to settle in the area, and which encourages long term involvement in the community; and • engage regularly with the Fairfax Public School. 	Maules Creek population data / school enrolments.	

HOUSING AND ACCOMMODATION

Mitigation / Enhancement Measure	Proposed Indicators	Impacts
<p>Continue to address housing and accommodation impacts, including as examples:</p> <ul style="list-style-type: none"> • continue to house non-local workforces in the Civeo camps in Boggabri or Narrabri; • continue to financially encourage non-local employees to relocate to the area; • monitor the housing market through regular engagement with local service providers, real estate agents and councils; • provide financial support to community services that provide social, affordable or crisis accommodation; and • continue to support development of housing in Narrabri, Gunnedah and Boggabri should the housing market remain constrained when the Project proceeds. 	<p>Community satisfaction with housing investment.</p>	<p>Continued contribution to pressure on the housing market, affecting people needing affordable housing.</p>



LAND AND WATER MANAGEMENT

Mitigation / Enhancement Measure	Proposed Indicators	Impacts
Develop and implement a program of engagement and information provision around groundwater management , including as examples: <ul style="list-style-type: none"> • Participatory monitoring of groundwater levels. • Share groundwater information with local landholders and residents annually. • Invite experts to share groundwater information with communities. 	Degree of community concern around water impact.	Concern around groundwater impact.
Engage with and support local Rural Fire Service (RFS) brigades, including: <ul style="list-style-type: none"> • encourage workforce to volunteer with RFS and provide leave during emergencies; • conduct joint pre-incident planning exercises with RFS; • work with RFS to identify fire risks at Whitehaven-owned land; • provide a point of contact for RFS to liaise with during emergencies. 	Number of RFS volunteers.	Continued contribution to the vitality of community groups.
Develop and implement strategies for management of feral animals jointly with affected residents.	Number of complaints relating to feral animals.	Potential for continued feral animal incursions affecting the quality of life and livelihoods of nearby landholders.

PLANNING FOR THE FUTURE

Mitigation / Enhancement Measure	Proposed Indicators	Impacts
<p>Establish a team to commence planning – together with the community – the socio-economic future of the region, including considering:</p> <ul style="list-style-type: none">• potential productive uses of the Project area and Whitehaven-owned land post closure;• supporting community capacity to manage change;• support programs that build economic diversity and resilience; and• reskilling or upskilling the workforce.	<p>Community satisfaction with closure planning.</p>	<p>Impacts of closure, including:</p> <p>Reduced opportunities for businesses to supply goods and services.</p> <p>Reduced employment opportunities.</p> <p>Reduced contribution to population stability.</p> <p>Potential for impact to community cohesion.</p>

COMMUNICATION AND ENGAGEMENT

Mitigation / Enhancement Measure	Proposed Indicators	Impacts
<p>Continue to engage with the community through a variety of means, including:</p> <ul style="list-style-type: none"> • the MCCM CCC; • the joint BTM CCC; • face to face meetings with nearby landholders and residents; • regular meetings with councils and community organisations; • conducting community surveys to understand community aspirations and concerns; • publishing newsletters; and • maintaining a complaints hotline. <p>Providing social and environmental performance information via the Whitehaven website and to the MCCM CCC.</p>	<p>Community satisfaction with engagement and information sharing.</p>	<p>All relevant impacts, in particular: Continued contribution to the vitality of community groups. Concern around groundwater impact.</p> <p>Potential for population reduction in Maules Creek. Continued provision of employment opportunities for residents, thus contributing to socio economic wellbeing</p>





THANK YOU!

