

Notes: Notes of the 43rd Meeting of the Maules Creek Coal Community Consultative Committee
Held at Boggabri Golf Club at 2:00 pm.

Wednesday 25 October 2023

Members Present: Angus Frend (AF) – WHC, Darren Swain (DS) – WHC, Elizabeth O’Hara (EOH) – Community Representative, Jabin de Keizer (JdK) – WHC, Libby Laird (LL) – Maules Creek Community Representative, Michelle Henry (MH) – Narrabri Shire Council, Robyn Grover (RG) – Community Representative, Steve Eather (SE) – Community Representative.

Apologies: Cr Brett Dickinson (BD) – Narrabri Shire Council, Emma Bulkeley (EB) – WHC, Lyndell Crowley (LC) – Community Representative, Talan Breden (TB) – WHC.

Independent Chair: David Ross (DR)

Independent Secretary: Debbie Corlet (DC)

Agenda Items	Who to Present
1. Welcome and Apologies	DR
2. Declaration of pecuniary or other interests	DR
3. Confirmation of the Minutes of the previous meeting – Wednesday 30 August 2023	DR
4. Business arising from the previous minutes	DR
5. Company Overview	WHC
6. Mine’s Environmental Performance	
7. General Business	
8. Next Meeting – Wednesday 14 February 2024	ALL

Agenda Item	Discussion	Action/By Whom
1.	Welcome and Apologies – DR welcomed everyone to the fourth and final meeting of the year.	
2.	Declaration of Pecuniary or Other Interests – DR is paid a fee as chair as is DC for typing the minutes. EOH has a small bundle of WHC shares. RG has a family member working at Maules Creek.	
3.	Confirmation of the Minutes of the Previous Meeting – Members were comfortable with the minutes from the previous meeting.	
4.	Business Arising from the Previous Minutes DR noted that there had been no interest in new membership on the committee. Will continue to keep trying. DR noted that LL had sent through questions shortly after last meeting as well as requested presentation on continuation project that still required a response. Subsequently, DS provided members with a briefing note in response and committed to providing slides shortly. EOH observed that, at the last meeting, the length of the pipeline was mentioned. Was it 10.5 kms? Total length to be confirmed. LL – Briefing note to be added to the Minutes.	ACTION 1 – DS to provide Continuation Project slides from last meeting. ACTION 2 – DS to confirm the total length of water pipeline. ACTION 3 – DR to add Briefing Note to the Minutes.
5.	Maules Creek Update Health and Safety Performance AF – Discussed the health and safety performance for the mine. LL – We need the acronyms spelt out please. Air Quality Monitoring AF noted that there were no exceedances were recorded at either the HVAS (high volume air sampler) or the TEOM (PM10) over the previous quarter. EOH – With respect to PM 2.5, which is a critical measure of impacts of air quality and dust, could a future slide be put together that compares Maules Creek mine with the other locations shown on the PM10 slide? DS – We'll take it as an action to see if it is feasible before we can say a slide can be produced.	ACTION 4 – WHC to ensure acronyms are spelt out in future presentations. ACTION 5 – WHC to change colours in slides so they stand out more. ACTION 6 – MCCC to explore feasibility of having rolling

	<p>Agreed to by members. LL – Is the Annual Review out for this year? AF – No, 2023's review is with the DPE; however, the Review for 2022 is out: – https://tinyurl.com/2fdkp5ty</p> <p>Tyre Disposal 2023 – No tyres have been disposed of in 2023. AF also talked to some notes of the Biodiversity Offset Trip, undertaken by the CCC in August (see graph on page 17 of slides). EO - requested that photos and reasonably detailed notes be provided especially as we didn't stop during the trip.</p> <p>Biodiversity Management</p> <p><i>Feral Animal Management</i> – Most recent routine WHC Biodiversity Feral Animal Control program (July to September 2023) – 1,153 out of total 1,767 pigs trapped or baited were from the Maules Offset properties. 232 out of total 461 goats harvested were from the Maules Offsets properties. 158 out of total 282 Canid Pest Ejectors (1080) consumed were from the Maules Offset properties.</p> <p><i>Weed Control</i> – During last quarter, the following weed control was undertaken via sport spraying / jetting on the Maules Offset Properties – 125ha of Broadleaf weeds such as Pattersons Cruse, Turnip, Saffron Thistle and Variegated thistle has been treated. 5.86ha of Woody Weeds and others, such as Box Thorn, Prickly Pear and Reveg Holes has been treated. There was also 41ha of tracks sprayed as part of the track maintenance.</p> <p><i>Annual Fauna and Flora Monitoring</i> – has commenced.</p> <p>AF also noted that works are being undertaken to maintain fire breaks as well as construct new fire break tracks on additional offset properties. Tree planting at Onavale will also be completed in next quarter.</p> <p>Approvals – Continuation Project EIS – Environmental studies / modelling and community consultation ongoing. Scoping Report lodged with DPE in October 2023. SEARs (Secretary's Environmental Assessment Requirements) expected by end of 2023. Scope of all environmental assessments to be reviewed upon receipt of SEARs.</p> <p>DR reminded members that, as the SEARs are not expected until the end of the year, this means that the EIS will not be completed for at least 12 months.</p> <p>Modification 9 – BOS and ETL – A Response to Submissions (RtS) report will be provided to DPE responding to agency, organisation, and individual submissions. Submission of report timing extended to end of 2023.</p>	<p>PM2.5 slide in future.</p>
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	<p>AHS – ~20-24 autonomous trucks operating at any one time. AHS at Maules Creek has passed 100,000 hours of operation. Over 200 people are trained and competent in AHS operations at Maules Creek (In-pit, Mine Control and Engineering teams).</p> <p>DS noted that the AHS transport the over-burden not the coal. LL – Will they also go electric in the future. DS – We'll include in future presentations if this occurs.</p> <p>Community – Donations / Sponsorship July to September 2023 - \$71,575.32 spent in the local community. Highlights – St Xaviers Narrabri – new school playground, Quirindi Show Society – Sponsorship of the PBR rodeo.</p> <p>LL – What is the definition of regional sustainability? DS – Could be Westpac Rescue. Could be health related in that space. That equates to about 2/3rds of that \$71,575.32 handed out over quarter. Anything that adds value and builds resilience in the region.</p>	<p>ACTION 7 – WHC to condense the AHS slide page.</p>
6.	<p>General Business</p> <p>LL – The clearing season in 2023 – how much was cleared and where was it cleared. Requested a map and where on the site was it cleared in 2022 and 2023 and plus, I'd like to see your Forward Plan. Plus, a slide on clearing moving forward for 2024. Finally, on behalf of the Maules Creek CWA, we ask that you don't clear, even if you have approval. DS – Nothing has changed with respect to what is in our Forward Plan.</p> <p>AF – 32 hectares were cleared this year.</p> <p>LL – In relation to your Modification (Expansion / Mobile rock crusher moved), was there clearing in relation to that and where would that have been done? AF – It would have been 2022. I can't answer that right now.</p> <p>EOH – About the tyres – what research are you undertaking at the mine? Who have you engaged with? DS – The report submitted to the EPA is on behalf of both Tarrawonga and Maules Creek. We can look into sharing of that information once the EPA has reviewed the report.</p> <p>EOH – Re March 2020 blast. The High Court will hear WHC's appeal on Friday that the Judge hearing the case be removed. I know you can't comment on it. It's one of 20 land cases in the court at the moment. It causes a great degree of anxiety in the community. I think the community deserve to know the details. DS – As nothing has changed (since our last meeting), can take it as a comment only.</p> <p>DS – Fact Sheet on the Continuation Project will be released shortly.</p>	<p>ACTION 8 – WHC to provide information on clearing for 2022, 2023 and 2024 as well as on slide for next meeting.</p> <p>ACTION 9 – WHC to provide details on the clearing for the mobile rock crusher.</p>

	<p>LL – Highlighted the importance of biodiversity and offsets.</p> <p>Presentation by DR re the Revised CCC Guidelines DR observed that the revised guidelines have been released with only incremental changes in comparison to the previous guidelines. He discussed: the different roles on the CCC; the minutes and how they are managed; the code of conduct including interviews with the media; and finally, the Terms of Reference (see attachment).</p> <p>Next 12-months</p> <p>DR then invited committee members to suggest what could be the focus on meetings through 2024. After a lengthy discussion, a list of suggestions was raised (see Appendix 2). DR noted that, as many of the requests may be aligned with information that needed to be prepared as part of the expansion project, DR would contact DS early in the new year to determine what presentation(s) could be given in the February meeting (e.g. social impact assessment).</p> <p>Committee members agreed that meetings are to be moved forward to 1 pm from 2 pm. Most members signed the new code of conduct. DR invited members, if they wished, to take the code home and review and bring back for February meeting.</p> <p>A discussion took place with respect to the rolling groundwater graphs and whether better graphs were required. It was noted that the graphs were a legacy of committee members who had previously thought the rolling graphs provided important information. That is, the CCC wanted the history. DS and AF noted that they could shorten the graphs for members.</p> <p>LL – Our perspective from on-ground observations is that the bore levels are dropping. The water is impacted by what is going on. DS - noted the data in the groundwater hydrographs showed that was not the case. DR – It could be arranged to have a hydrologist or even someone from the compliance section within DPE come and present about what they do.</p> <p>LL – We don’t have an Environmental Rep or an Aboriginal Rep as required under the conditions. Or could they be from outside region and attend via video? DR – As mentioned, I’ve struggled to find people to come on. The challenge is always the internet reception for a lot of people.</p>	<p>ACTION 10 – Provide shorter hydrographs for meetings.</p> <p>ACTION 11 – DR to review Guidelines to see if community members can join who live outside the area.</p>
7.	<p>Next meeting date Wednesday 14 February at 1:00 pm.</p>	

Meeting Closed: 4:31 pm.

Appendix 1: Actions

Page No	Action No	Description	Date Raised
2	1	DS to provide Continuity Project slides.	25 October 2023
2	2	DS to confirm the total length of water pipeline.	25 October 2023
2	3	DR to add Briefing Note to the Minutes.	25 October 2023
2	4	WHC to ensure acronyms are spelt out in future presentations.	25 October 2023
2	5	WHC to change colours in slides so they stand out more.	25 October 2023
2	6	MCCM to explore feasibility of having rolling PM2.5 slide in future.	25 October 2023
4	7	WHC to condense the AHS slide page.	25 October 2023
4	8	WHC to provide information on clearing for 2022, 2023 and 2024 as well as on slide for next meeting.	25 October 2023
4	9	WHC to provide details on the clearing for the mobile rock crusher.	25 October 2023
5	10	Provide shorter hydrographs for meetings.	25 October 2023
5	11	DR to review Guidelines to see if community members can join who live outside the area.	25 October 2023

Description
Invite Social Impact Assessment staff to present.
DR to invite Minerals Council Tyre Stewardship staff to present.
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 #43

Environmental Monitoring Report For the Q3 period, July – September 2023

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. LAeq, 15minute; GENERATED BY MCCM AGAINST OPERATIONAL DAY NOISE CRITERIA; JULY – SEPTEMBER 2023.

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

Table 1 - July 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	5/07/2023 22:30	0.4	45	F	No	35	45	<20	<20	Nil	Nil
NM2	5/07/2023 23:30	0.3	148	F	No	39	45	IA	IA	Nil	Nil
NM3	6/07/2023 00:23	0.2	39	F	No	35	45	IA	IA	Nil	Nil
NM4	5/07/2023 23:02	1.2	223	F	No	35	45	IA	IA	Nil	Nil
NM5	5/07/2023 22:00	0.1	278	F	No	35	45	IA	IA	Nil	Nil
NM6	5/07/2023 23:58	0.3	84	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 NPfI.
2. Site-only LAeq,15minute, includes modifying factor penalties if applicable.
3. Degrees magnetic north, "-" indicates calm conditions.

Table 2 – August 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	3/08/2023 22:30	0.4	357	F	No	35	45	IA	IA	Nil	Nil
NM2	3/08/2023 23:30	0.3	190	F	No	39	45	<20	<20	Nil	Nil
NM3	4/08/2023 00:21	0.6	35	F	No	35	45	<20	<20	Nil	Nil
NM4	3/08/2023 23:00	0.5	302	F	No	35	45	IA	IA	Nil	Nil
NM5	3/08/2023 22:00	0.4	63	F	No	35	45	IA	IA	Nil	Nil
NM6	3/08/2023 23:55	0.3	87	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 NPfI.
2. Site-only LAeq,15minute, includes modifying factor penalties if applicable.
3. Degrees magnetic north, "-" indicates calm conditions.

Table 3 – September 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	18/09/2023 22:31	0.4	76	F	No	35	45	IA	IA	Nil	Nil
NM2	18/09/2023 23:30	0.2	160	F	No	39	45	IA	IA	Nil	Nil
NM3	18/09/2023 23:53	0.2	162	F	No	35	45	<25	<25	Nil	Nil
NM4	18/09/2023 23:00	0.4	94	F	No	35	45	IA	IA	Nil	Nil
NM5	18/09/2023 22:00	0.2	149	F	No	35	45	IA	IA	Nil	Nil
NM6	18/09/2023 23:55	0.2	81	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 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
July	S
August	ESE
September	ESE

Blast Monitoring

There was 32 blasts at MCCM during Q3 2023. 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 (Lin Peak)	All	32	92.77	117.4	120	No
Vibration	mm/s		32	0.15	0.80	10	No

Air Quality

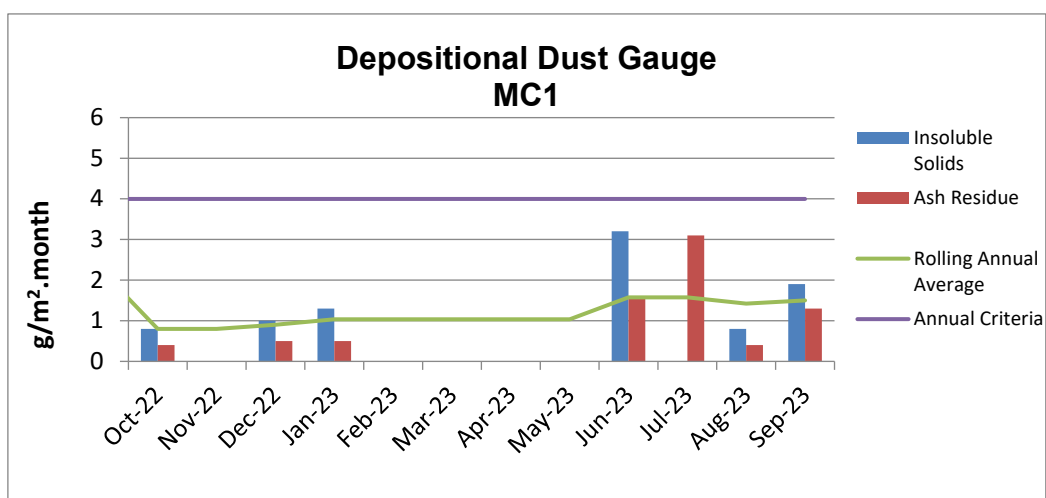
A. Total Depositional Dust

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.

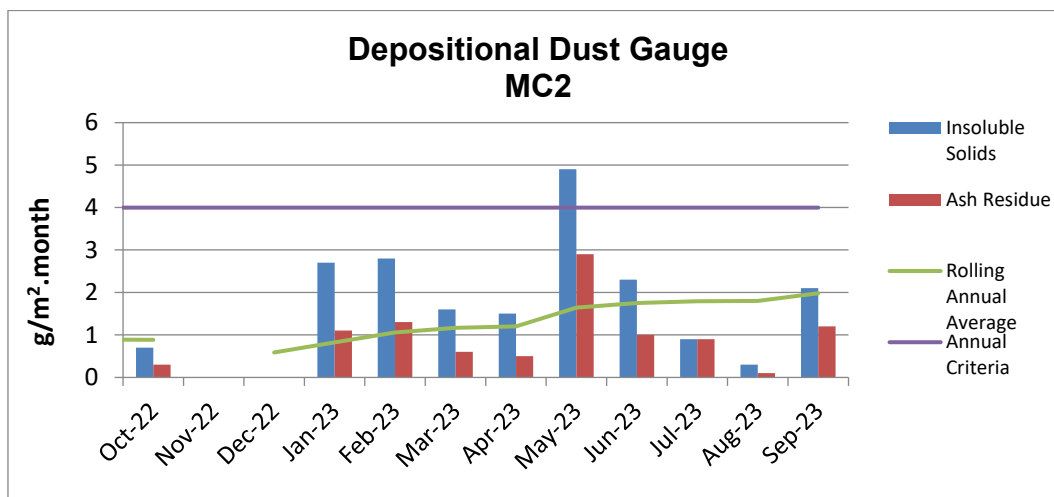
Table 6 – Depositional Dust Gauge Results [g/m²/month]

MONTH	MC1	MC2	MC3	MC4
July	5.1c	0.9	0.6	3.3
August	0.8	0.3	0.4	0.1
September	1.9	2.1	1.8	0.6
12 MONTH ROLLING AVERAGE	1.5	2.0	2.5	1.2

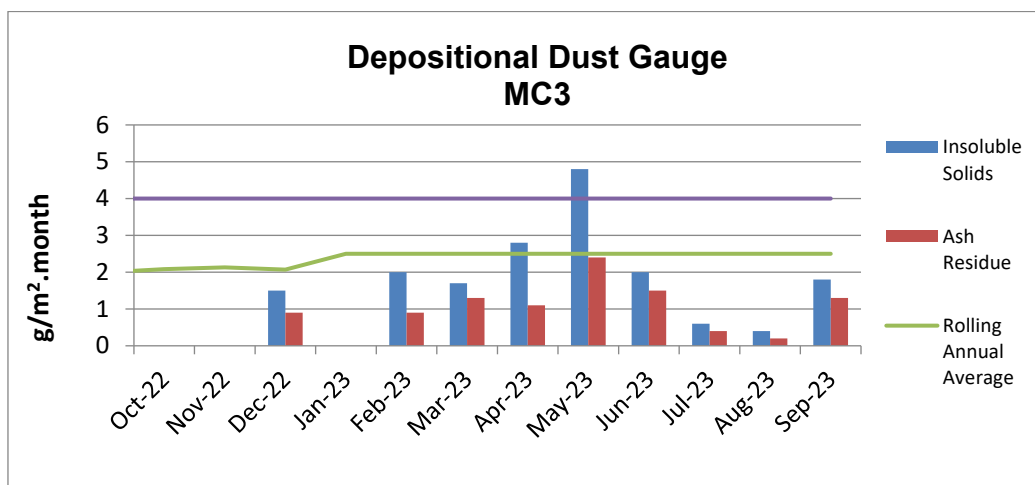
^c samples contaminated by bird dropping, decomposed insects or vegetable matter.



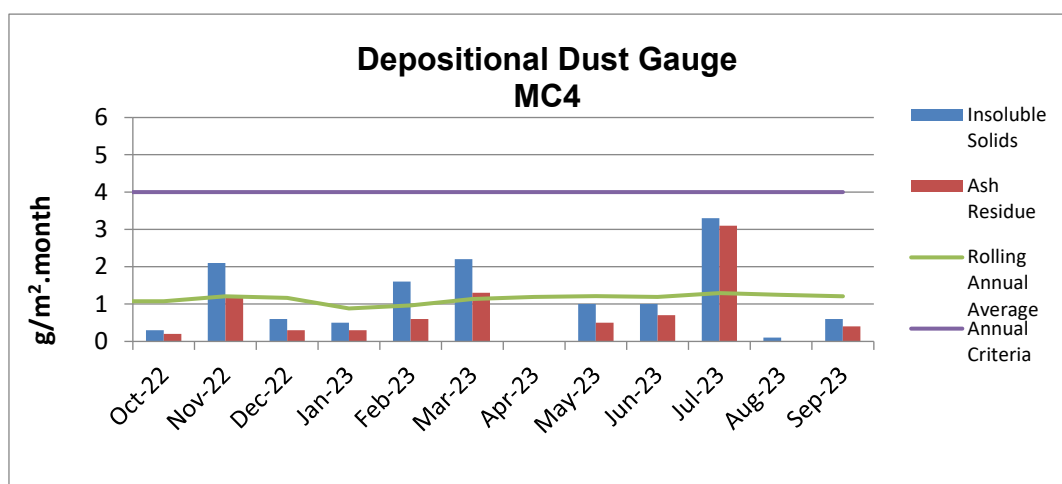
* Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated material (insect larvae, bird droppings, vegetation etc.).



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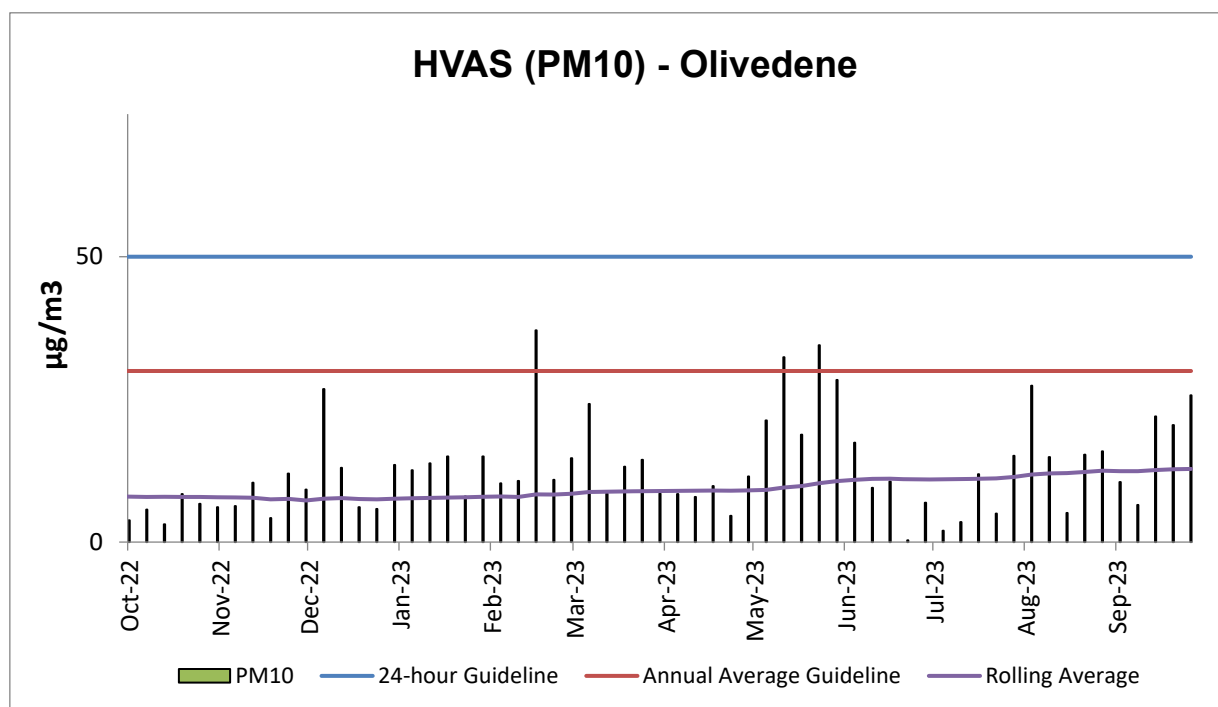


* Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated material (insect larvae, bird droppings, vegetation etc.).

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 $\mu\text{g}/\text{m}^3$.

HVAS PM₁₀ Rolling Annual Average as of June was **12.8 $\mu\text{g}/\text{m}^3$** , which is below the Annual Average Guideline of 30 $\mu\text{g}/\text{m}^3$.



C. TEOM - PM10 Results

The annual rolling average for PM10 at the Maules Creek Coal TEOM1 was **9.7 $\mu\text{g}/\text{m}^3$** , which is below the Project Approval annual average criteria of **30 $\mu\text{g}/\text{m}^3$** as shown in the following figure. There have been no exceedances of the 24-hour average for Q2 2023.

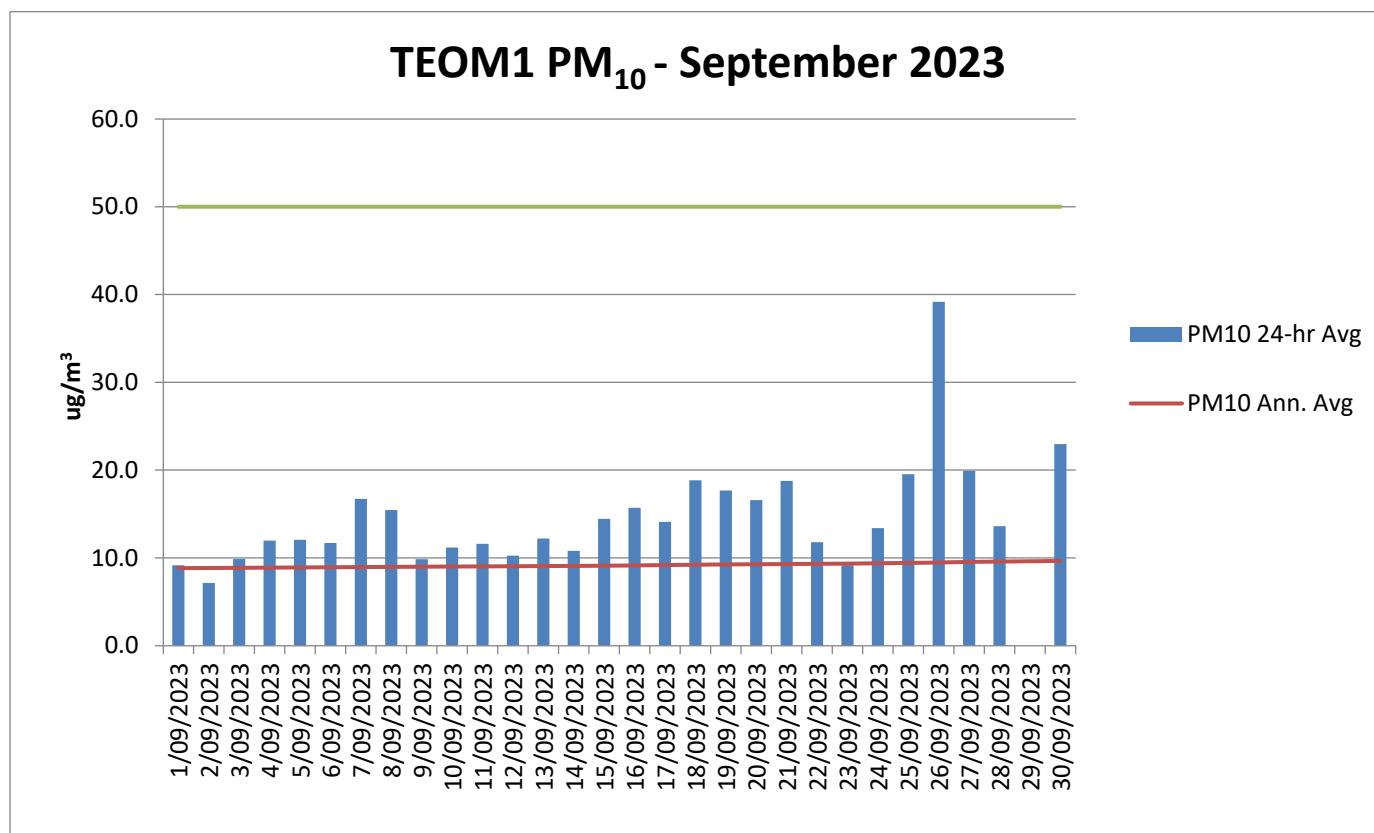


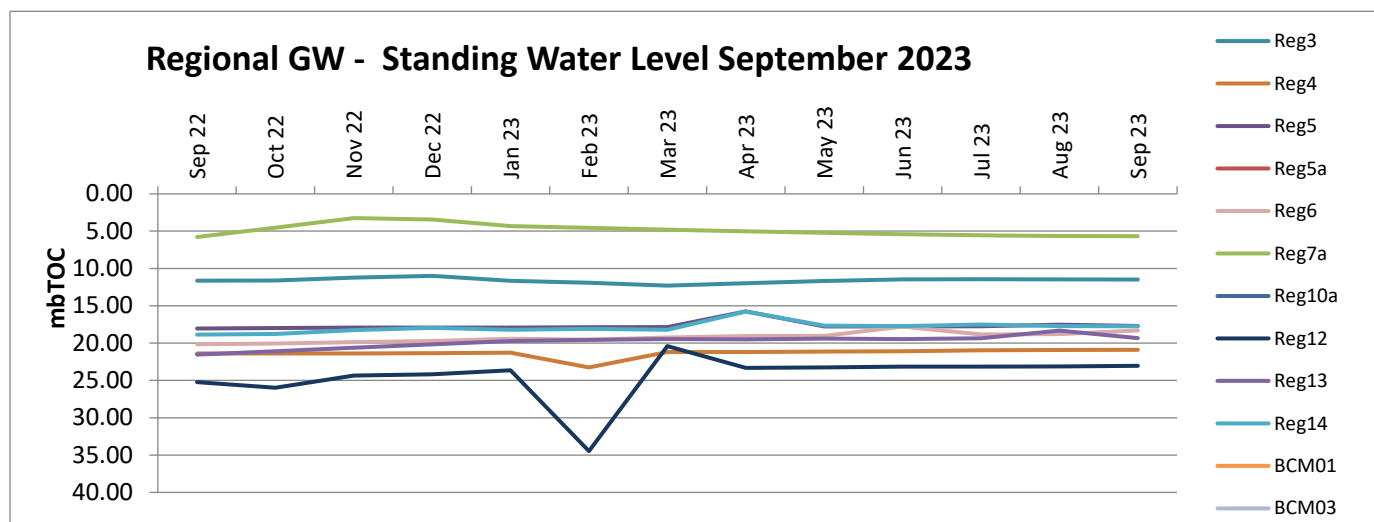
Figure 1 - TEOM Result – Particulate Matter PM₁₀ $\mu\text{g}/\text{m}^3$

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

Water Monitoring

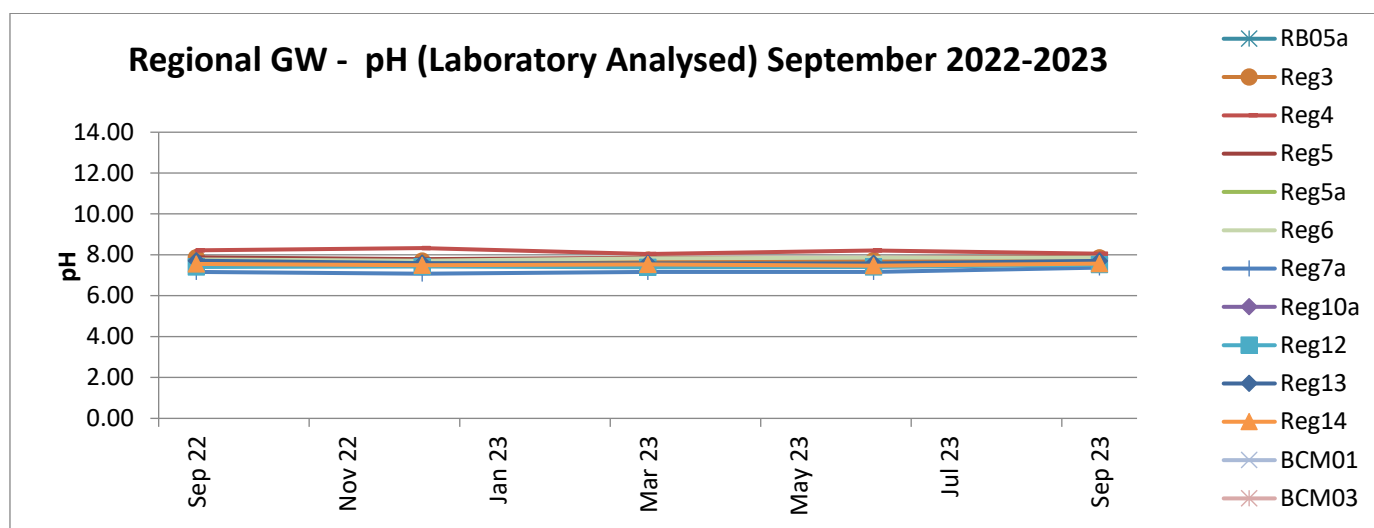
A. Groundwater

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.



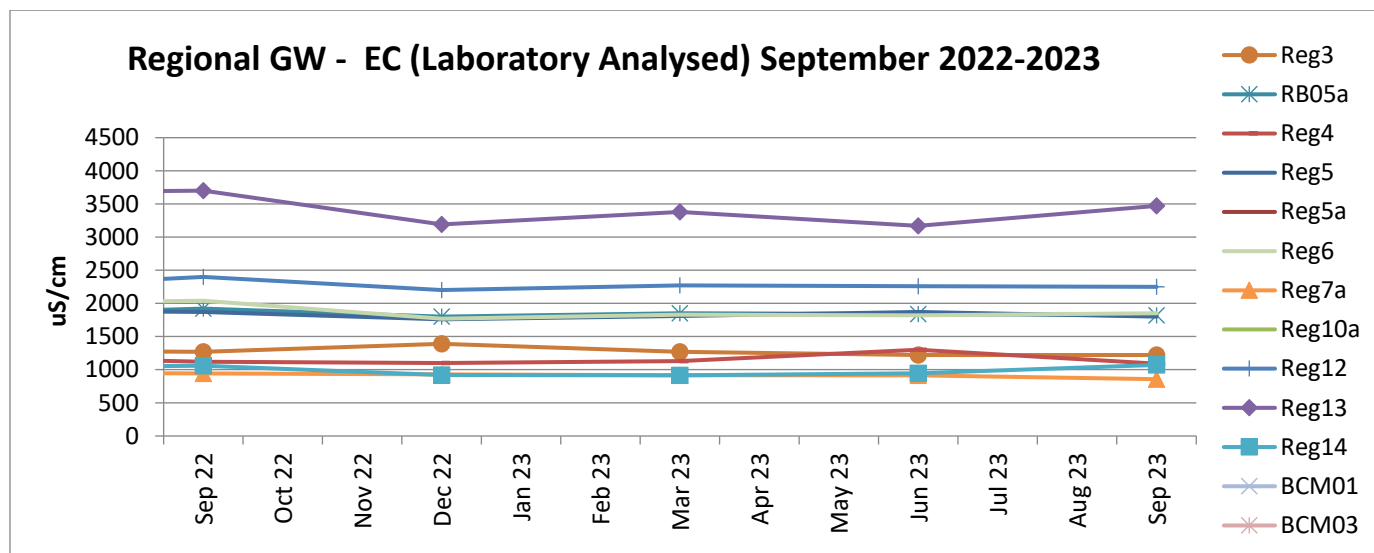
Acidity / Alkalinity (pH)

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_{µs/cm} to 2,500_{µs/cm}, with the exception of monitoring bore Reg13 which has a historic groundwater EC range of 2,500_{µs/cm} to 4,100_{µs/cm}. Within the last twelve months EC has remained static.

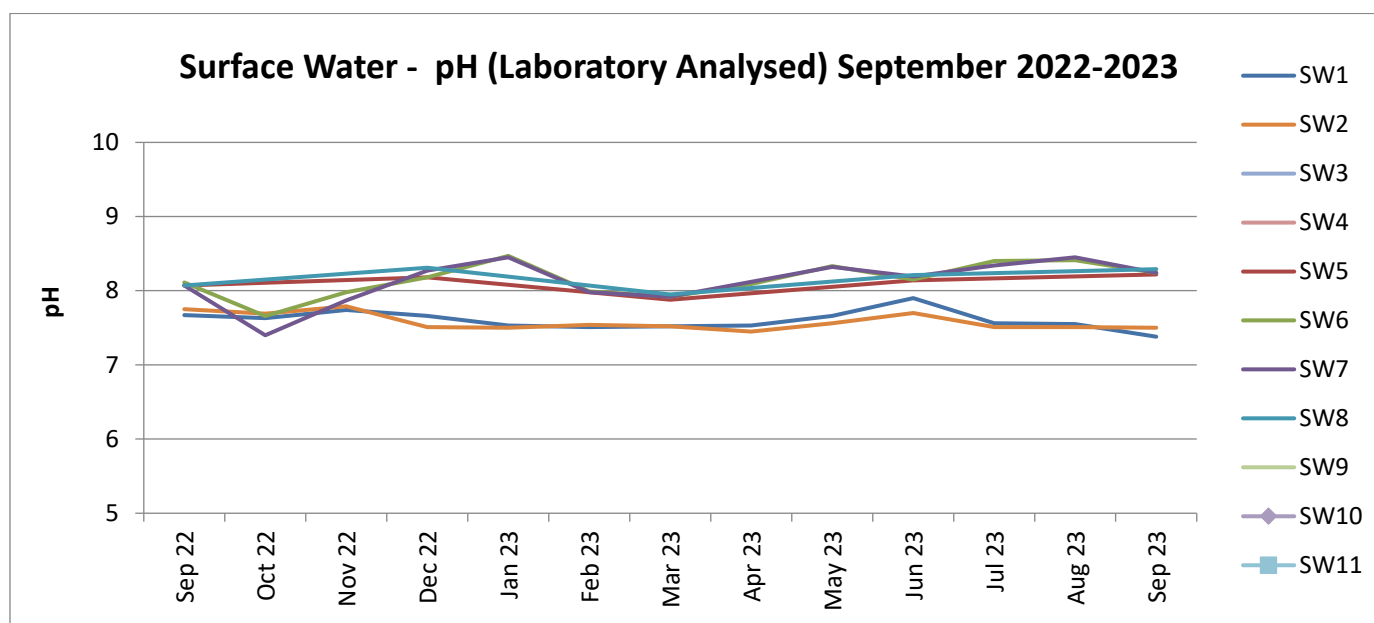


B. Surface Water – Creeks and Rivers

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. There are eleven surface water monitoring points, of which a maximum of six sites were able to be sampled during Q3 2023.

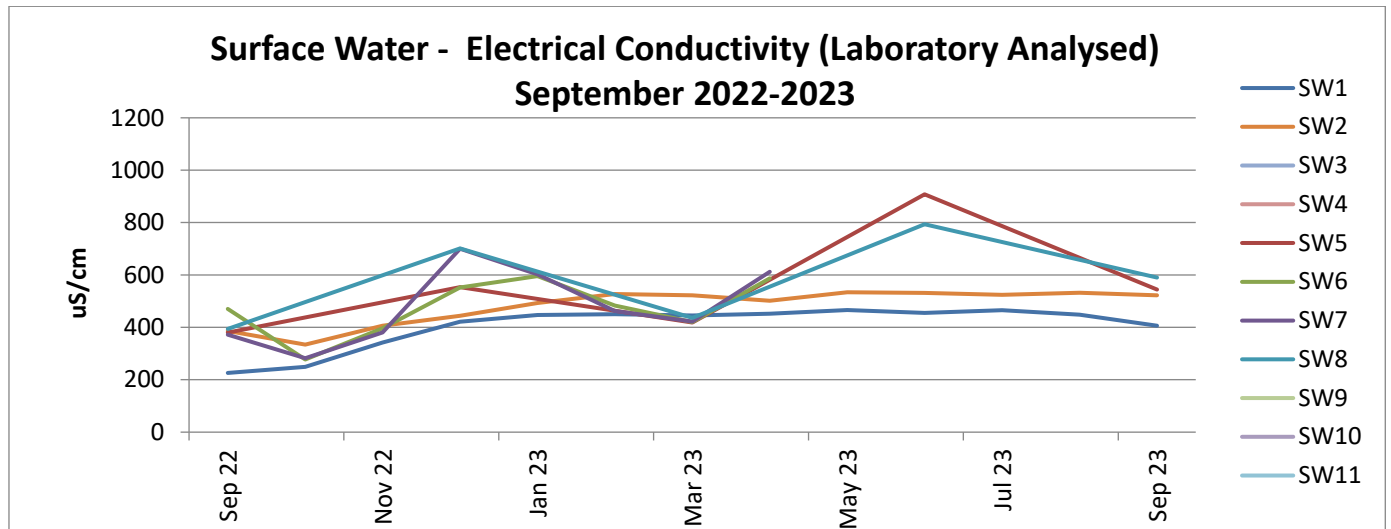
Acidity / Alkalinity (pH)

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



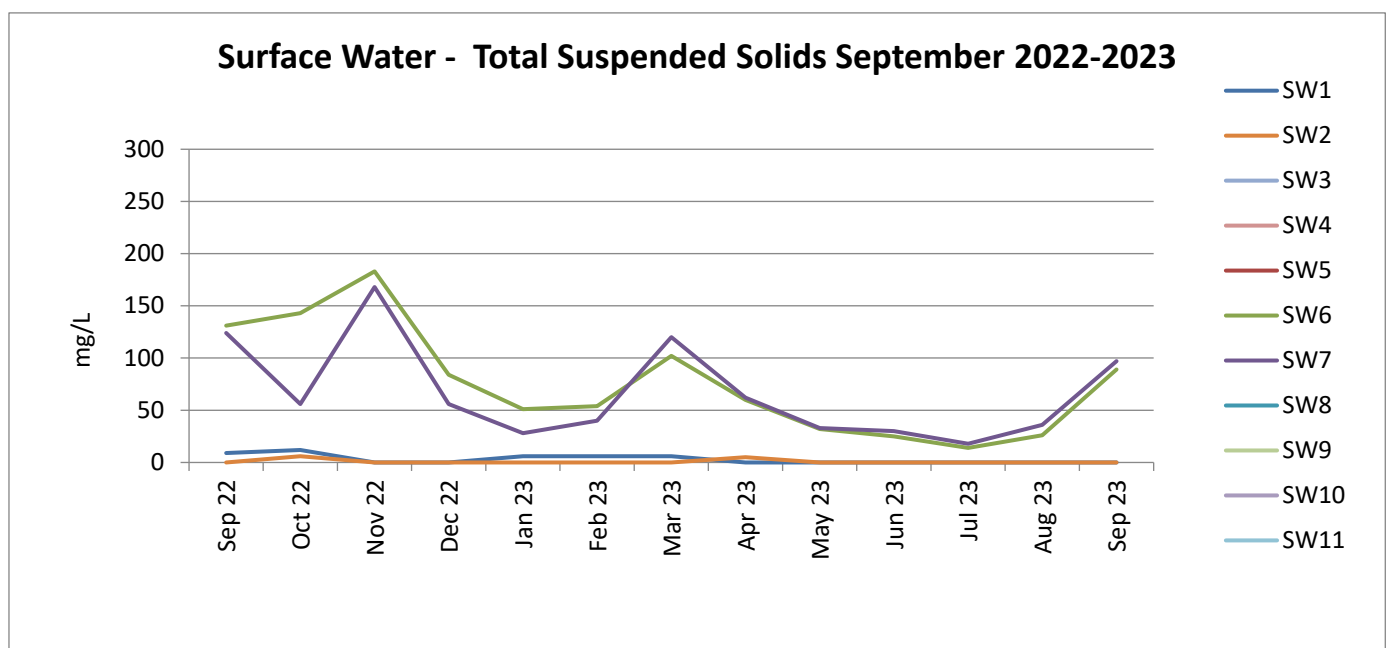
Electrical Conductivity

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)

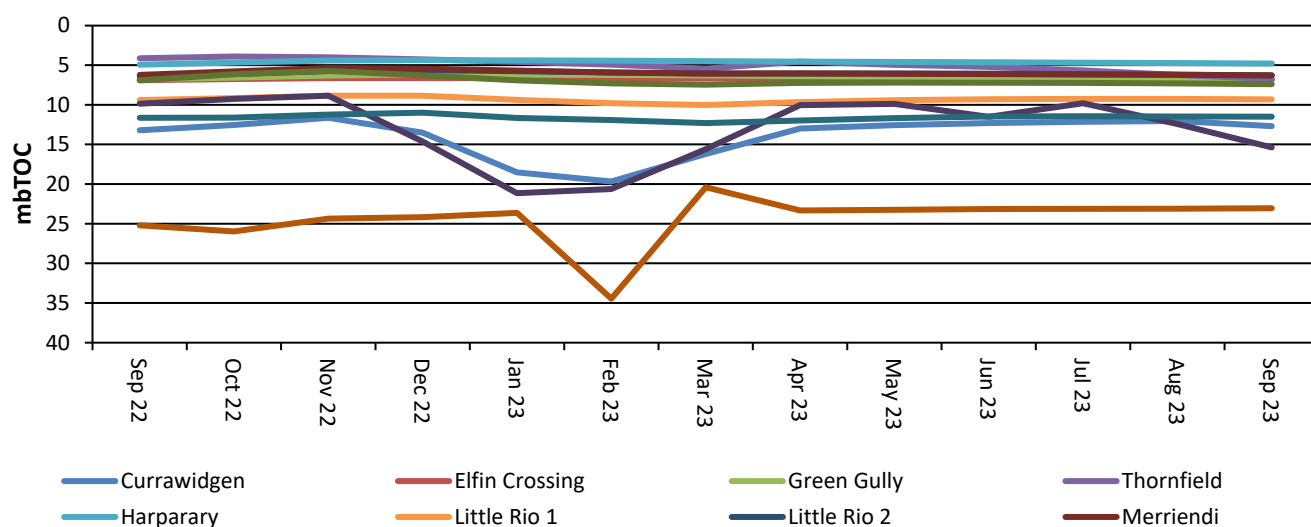
Surface water TSS trends have remained generally consistent with historical results. SW5, SW6, SW7 and SW8 are historically variable as they are located along the Namoi River which is subject to regulated and variable flow regimes. The Q3 results have continued to stabilised on the back of significant rainfall events in Q4 2022 and Q1 2023, as previously mentioned in Q2. This is demonstrated in the graph below.



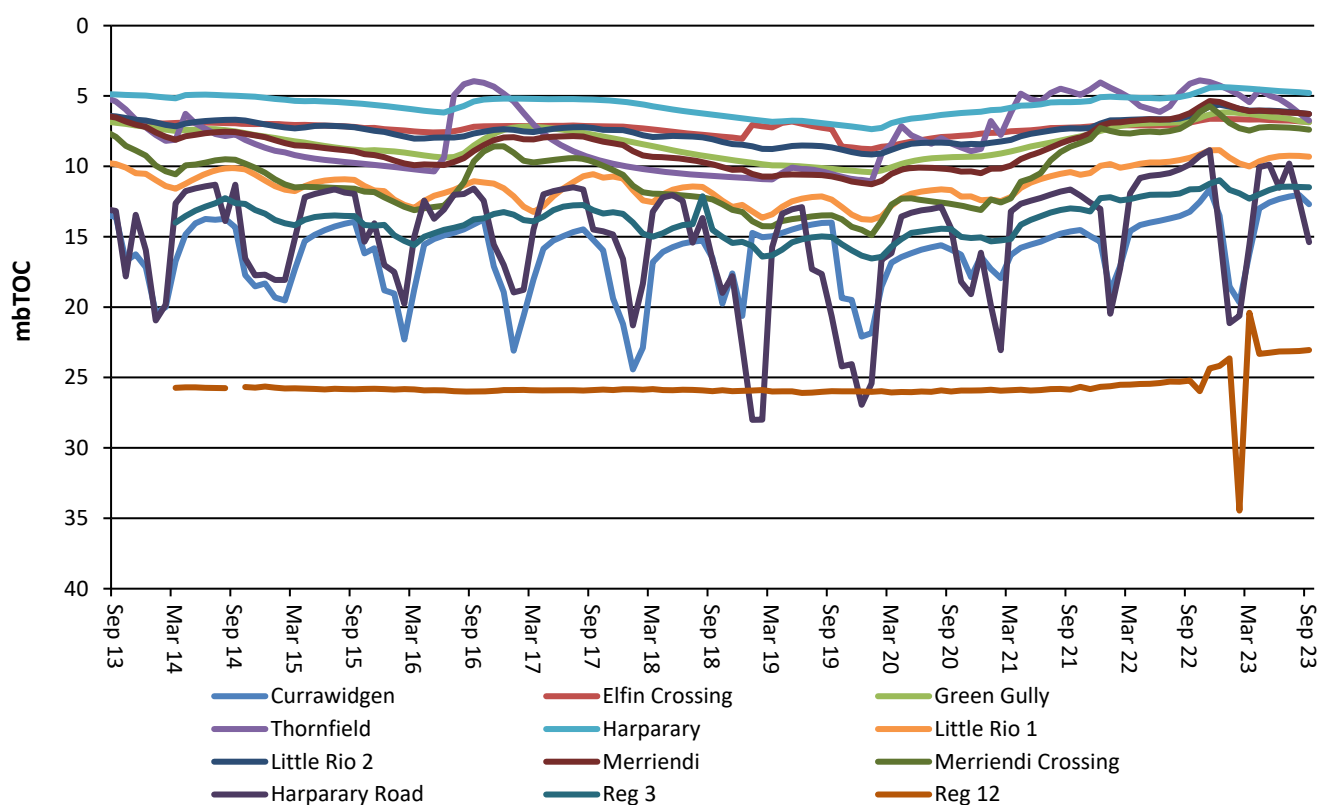
Regional Groundwater Monitoring

Maules Creek Coal Mine monitors regional bores across the region.

GW Bores SWL Comparison - 12 Months



GW Bores SWL Comparison - 10 Years



Rehabilitation

Progressive rehabilitation works are ongoing. MCC is on track to complete 20.9ha of rehabilitation for CY23.

Feral Animal Management

The proposed MCC feral animal management control program has been updated to accommodate the increase in feral species across the region. Additional waves of baiting and trapping are to be implemented throughout Q4.

Community Complaints

MCC received one complaint in Q3.

Date received	Method	Category	Nature of Complaint	MCCM Response
20/09/2023	Phone	Landholder access	A MCC employee accessed a neighbouring property without permission from the landholder.	On investigation it was identified that permission had been granted for the 21st September. The access process has been reinforced to employees and no access will occur without approval from landholders.

Briefing Note

To: Maules Creek Coal Mine CCC Members

From: Maules Creek Coal Mine (MCC)

Date: 25 October 2023

Reference: Responses to questions MCC CCC August 2023 Meeting

Subject: Responses to MCC CCC Actions and Questions

Question	Response
<p>Question 1.</p> <p>When are the monitoring bores Reg 11, Reg11a which were identified in the 2013 and 2019 Water Management Reports respectively, going to be drilled?</p>	<p>The GW monitoring network is developed by groundwater (GW) experts Australasian Groundwater & Environmental Consultants (AGE) and through consultation with DPE. These bores were located on 3rd party land and access was not granted. Alternate monitoring locations were adopted to replace these sites in the vicinity of Reg 11/11a including MOR2, MOR1, GW006567, Reg3, GW0300129_1.</p>
<p>Question 2.</p> <p>Why is there is still no reporting of Reg11 and Reg11a 10 and 4 years later?</p>	<p>See above</p>
<p>Question 3.</p> <p>Why don't WHC report bores Reg1 and Reg2? These bores were first proposed in 2013 and are, according to the 2019 Water Management Plan, located in the coal seams (and interburden) near the Green Gully Crossing and Thornfield Crossing Water NSW monitoring bores. If these levels were shown we would get some idea of the connectivity between the alluvium and hard rock in those locations.</p>	<p>These bores are reported in the Annual review, data for them can be found on page 138 of the report.</p>
<p>Question 4.</p> <p>I request that you report these to the CCC from the November 2023 meeting.</p>	<p>These bores are reported in the Annual review, data for them can be found on page 138 of the report.</p>
<p>Question 5.</p> <p>Why is there no monitoring bore in the coal seams and interburden near the Elfin Crossing Water NSW monitoring bores?</p>	<p>The GW monitoring network is developed by GW experts AGE and through consultation with DPE. REG1 and REG2 monitor coal seams and permium under the Zone 11 alluvial in locations where there is predicted to be drawdown in the coal seams. Landholder bores measure shallow GW levels near Elfin crossing. The alluvial and coal seams near Elfin Crossing are not predicted to be impacted by the mine and therefore this area isn't a suitable location to monitor impacts. Predicted impact figures are located in Figure 12.4 and 12.5 of the BTM complex GW model.</p>
<p>Question 6.</p> <p>Like point 2 above, it would give everyone an idea of the connectivity between the coal and the alluvium. Based on the outputs from the Namoi Water Study it seems like the</p>	<p>The monitoring program is developed by AGE in consultation with DPE. Locations are based on their expert advice and the predicted impacts detailed in the BTM complex model. It's</p>

Briefing Note

obvious place to have a monitoring bore in the coal. Can you include this in the next Groundwater Management Plan?	important that we monitor locations where impacts are predicted, so the model predictions can be validated.
Question 7. Why are the graphs in this monitoring report shown with disproportionate x toy axis? It is hard to get a handle on the trends with such badly constructed graphs.	Noted
Question 8. Would MCCM provide the data as well?	Groundwater data is provided in the Annual review.
Question 9. Would MCCM put page numbers on the monitoring reports?	Noted
Actions	
ACTION 1 WHC to report back on what properties are covered under Licence Number 346.	Wollondilly Warriahdool Cattle Plain Tralee Ellerslie
ACTION 2 WHC to add a slide re the TEM tracking as well as the actual link on the website.	https://www.planningportal.nsw.gov.au/major-projects/projects/maules-creek-continuation-project
ACTION 3 WHC to report back how many holes will be drilled.	There are 14 holes planned in Auth 346.
ACTION 4 WHC to add slide to every presentation about what is coming up in the next 3 to 6 months.	Included in the presentations under Approvals
ACTION 5 DR to send through the CCC Guidelines evaluation spreadsheet.	Noted
ACTION 6 DS to find out about the dialysis machine.	DS investigated, no dialysis machine is present in Narrabri.

Maules Creek Coal Mine

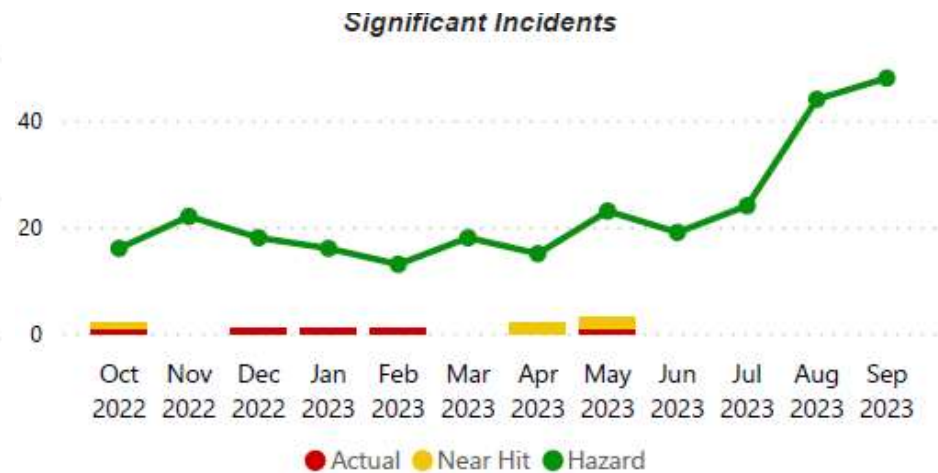
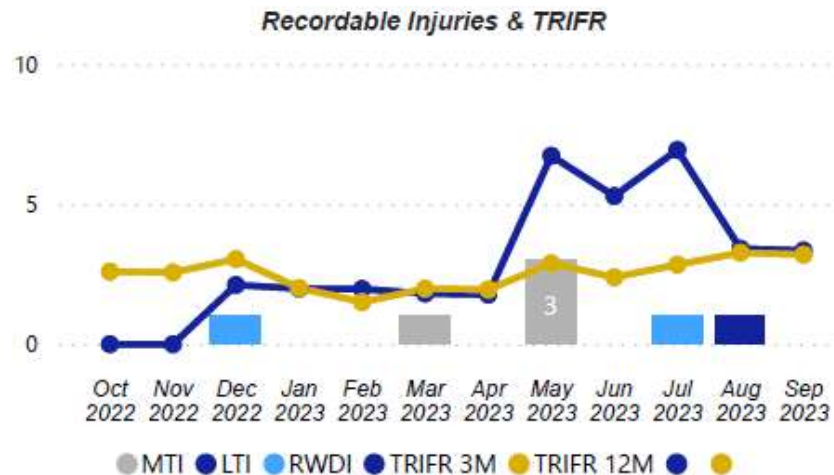
**CCC MEETING
Q3 2023**

Maules Creek Coal Mine
October 2023



MCC Health and Safety Performance

- TRIFR 3.2
- PL4+ Hazards = 116 Q3 FY
- Critical controls verified 100%



Environmental Monitoring

All data is summarised for quarter 3
in detail in the Monitoring Report
supplied

Maules Creek Coal
October 2023



WHITEHAVEN COAL

Environmental Monitoring

Q3 2023 - Air Quality Monitoring

Maules Creek Coal
October 2023



WHITEHAVEN COAL

Depositional Dust

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

MONTH	MC1	MC2	MC3	MC4
July	5.1c	0.9	0.6	3.3
August	0.8	0.3	0.4	0.1
September	1.9	2.1	1.8	0.6
12 MONTH ROLLING AVERAGE	1.5	2.0	2.5	1.2

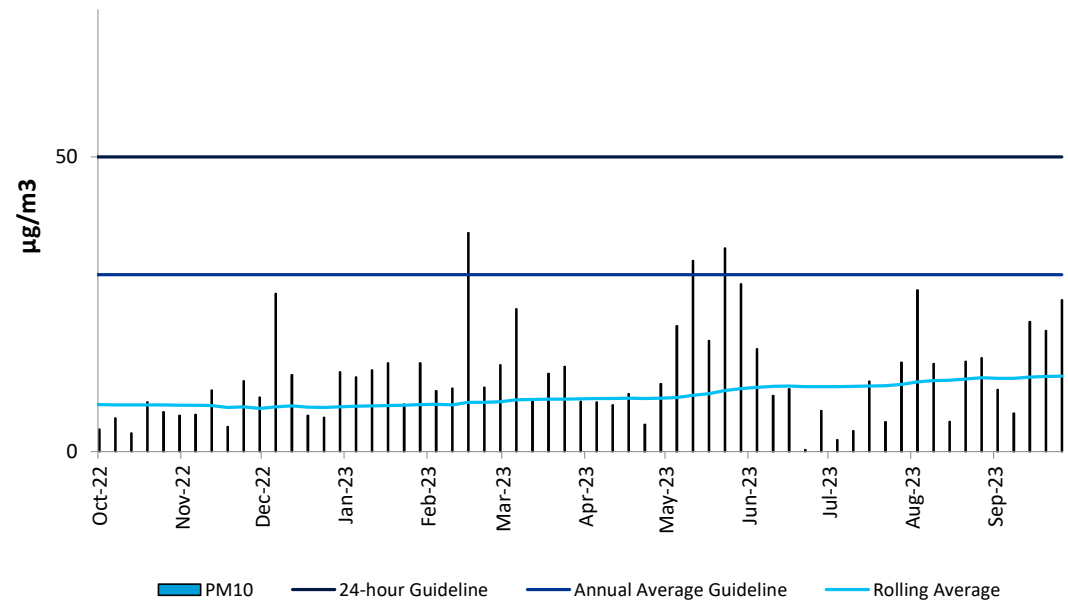
^c samples contaminated by bird dropping, decomposed insects or vegetable matter.

HVAS

High Volume Air Sampler

- The HVAS monitor is located on 'Olivedene'
- Data is publically available
- No exceedances recorded during the 24 hour average of $50 \mu\text{g}/\text{m}^3$
- The Rolling Annual Average was recorded at **$12.8 \mu\text{g}/\text{m}^3$** , which is below the Annual Average Guideline of $30 \mu\text{g}/\text{m}^3$.

HVAS (PM10) - Olivedene

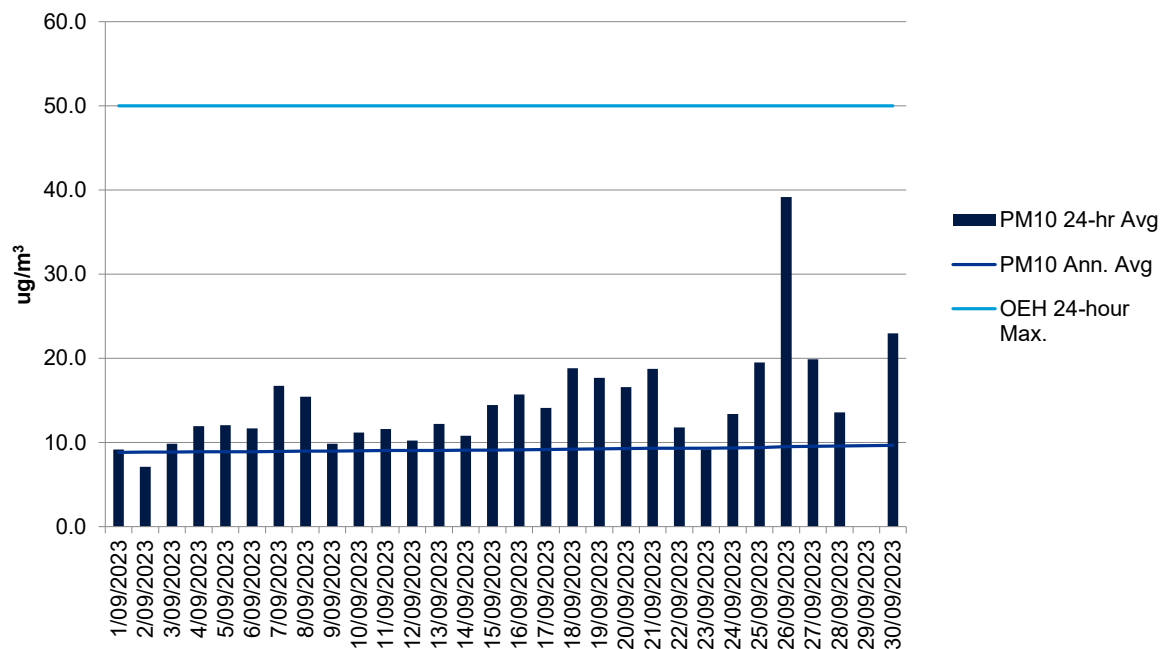


TEOM (PM10)

Tapered element oscillating microbalance

- Publicly available results of TEOM1 available on the EPA website.
- Annual rolling average for TEOM 1 is 12.8 $\mu\text{g}/\text{m}^3$ at 30th September 2023 (criteria 30 $\mu\text{g}/\text{m}^3$).

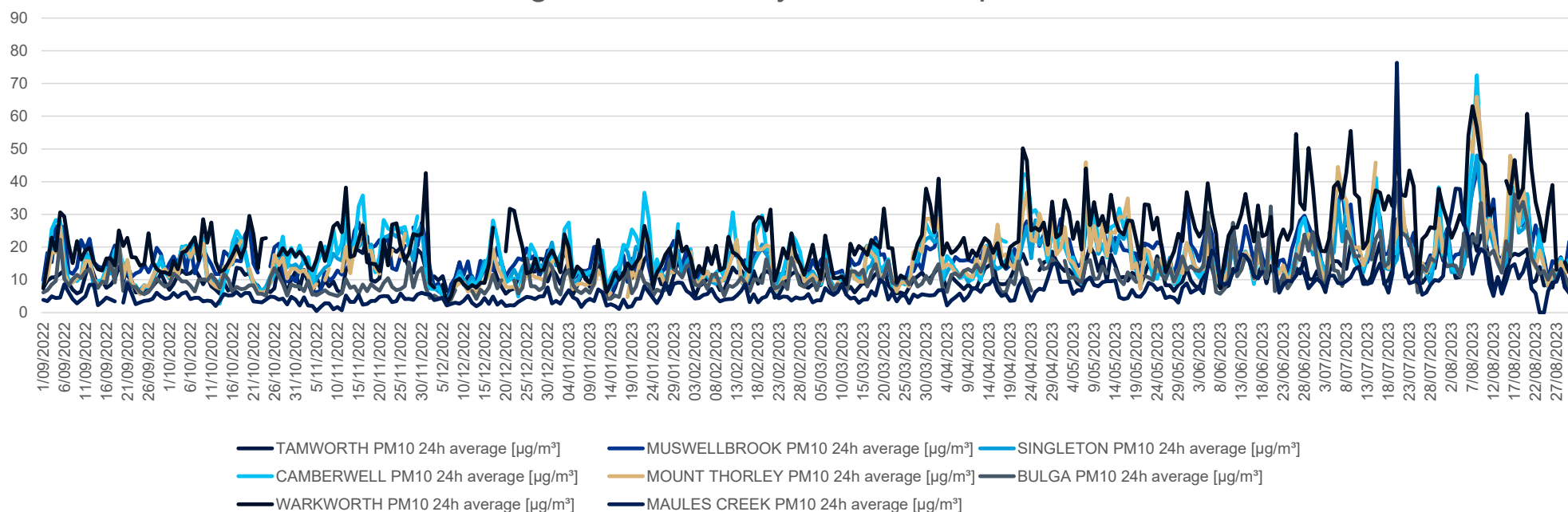
TEOM1 PM₁₀ - September 2023



Air Quality Monitoring Rolling 12 Months

Annual Reporting Data 1 September 2022 – 30 September 2023

Regional Air Quality PM10 Comparison



12 monthly	TAMWORTH PM10	MUSWELLBROOK PM10	SINGLETON PM10	CAMBERWELL PM10	MOUNT THORLEY PM10	BULGA PM10	WARKWORTH PM10	MAULES CREEK PM10
Annual Average	13.4	20.2	17.7	19.2	21.4	14.1	27.9	9.3
Max 24hr Ave	29.6	46.0	48.0	72.5	88.1	51.0	93.6	76.4

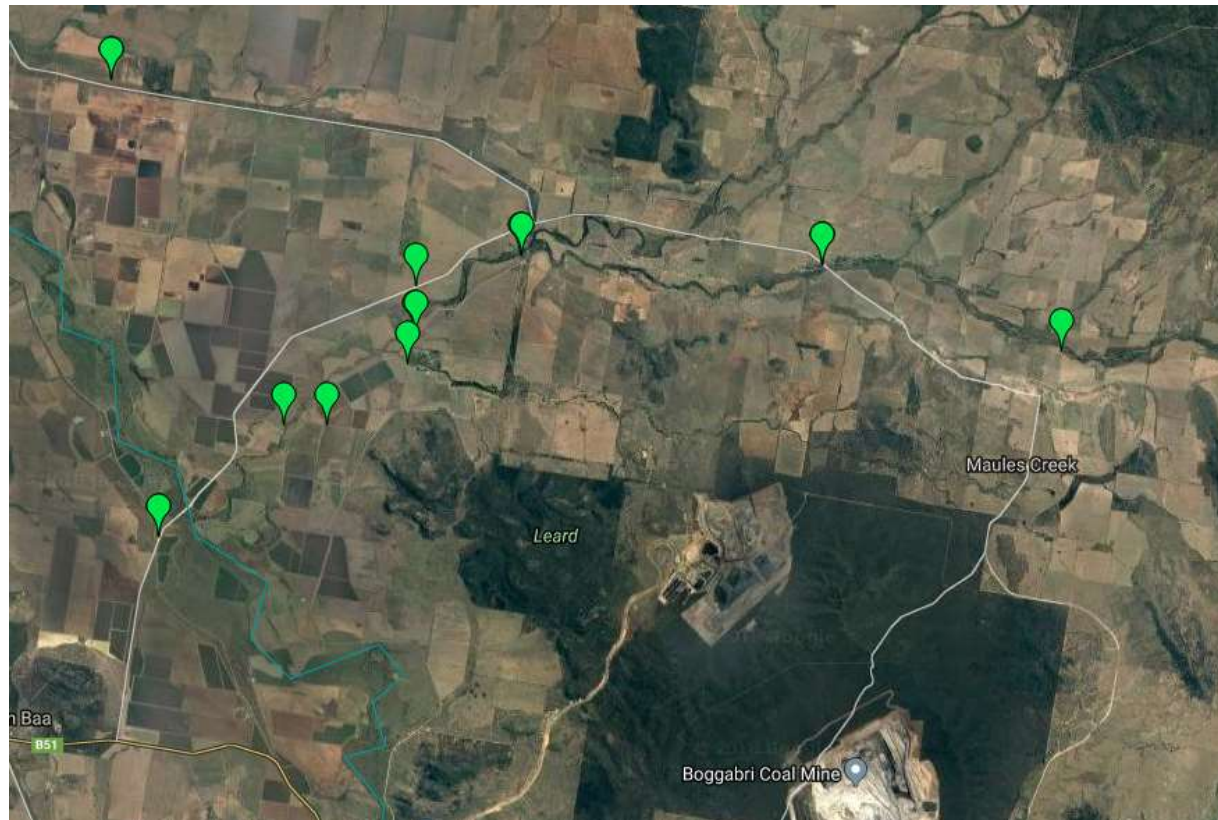
Environmental Monitoring

Q3 2023 - Groundwater

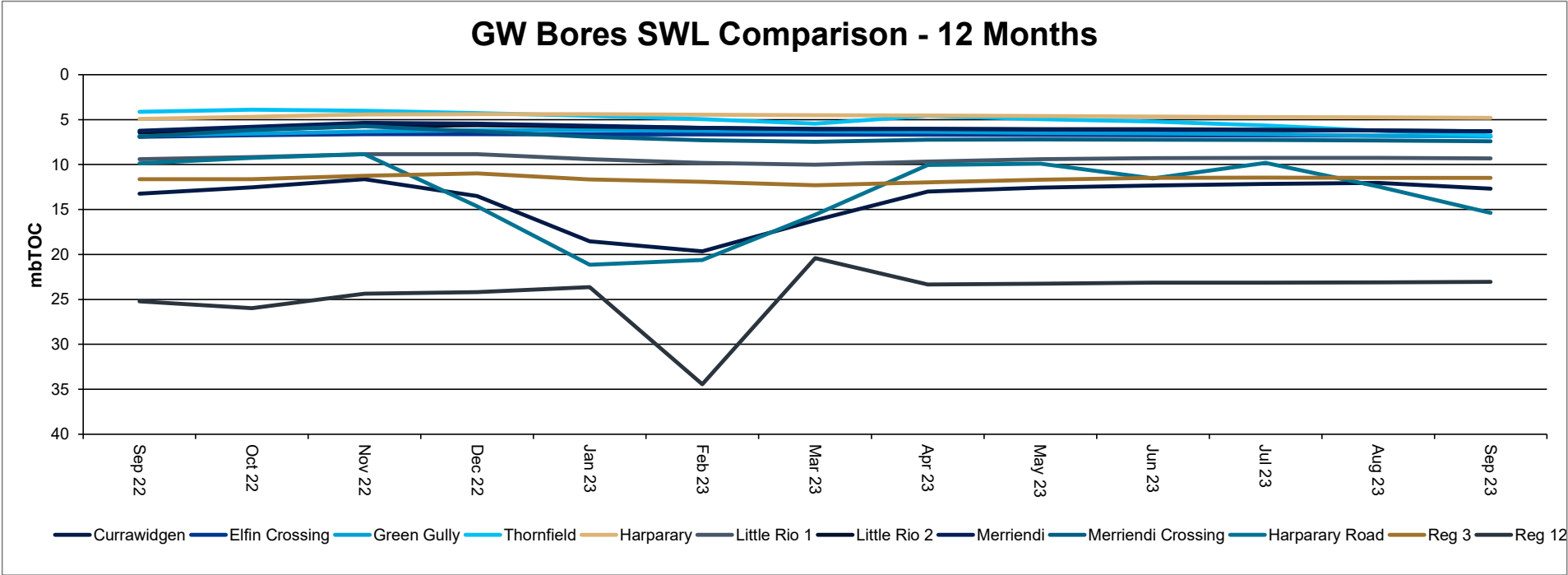
Maules Creek Coal
October 2023



Monitoring Locations



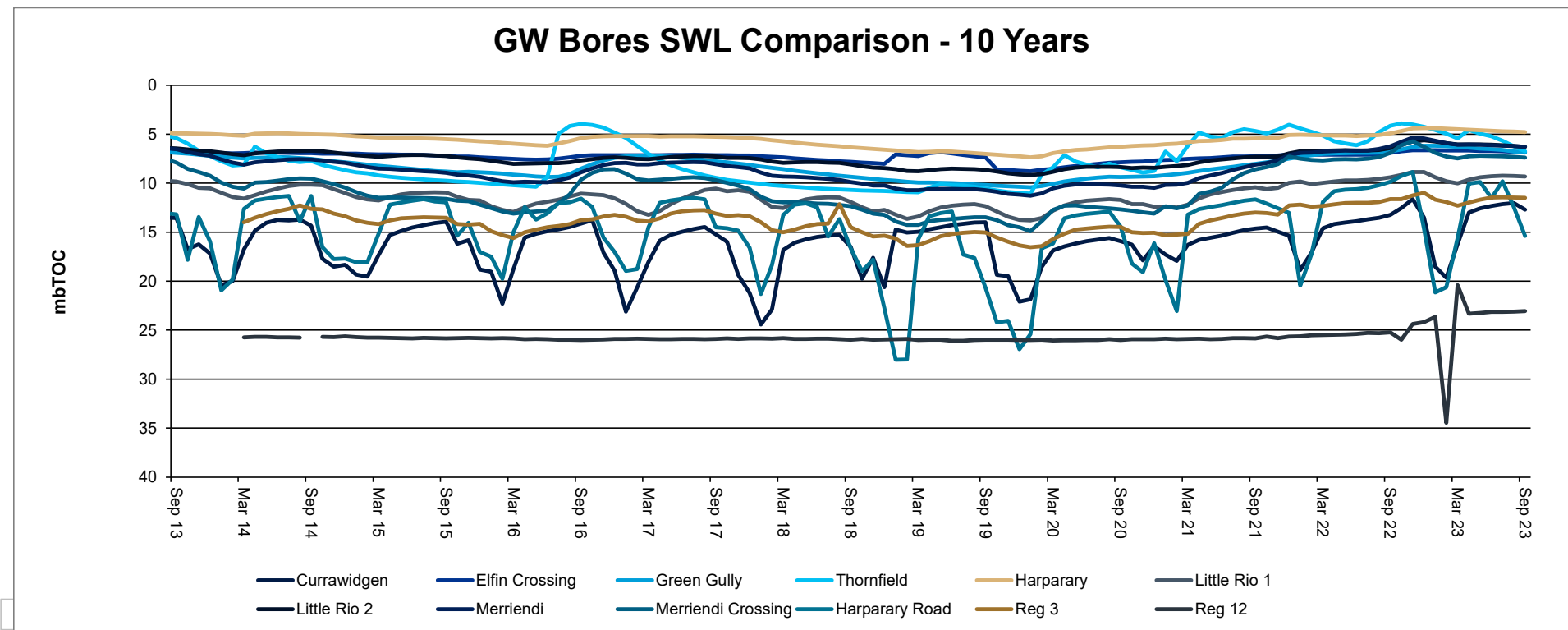
Groundwater Levels



* Note Reg12 and Reg3 both within Boggabri Volcanics

Source: NSW DPI- Water & MCCM monitoring data

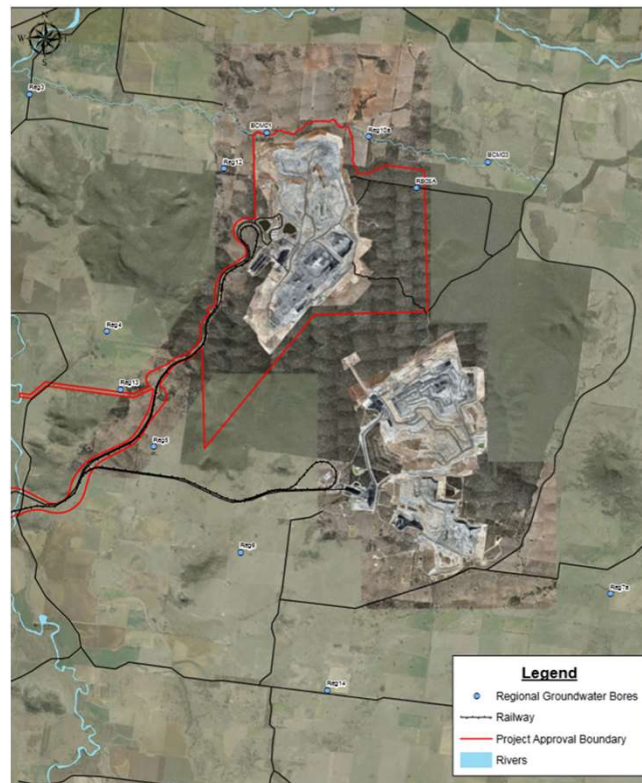
Groundwater Levels



* Note Reg12 and Reg3 both within Boggabri Volcanics

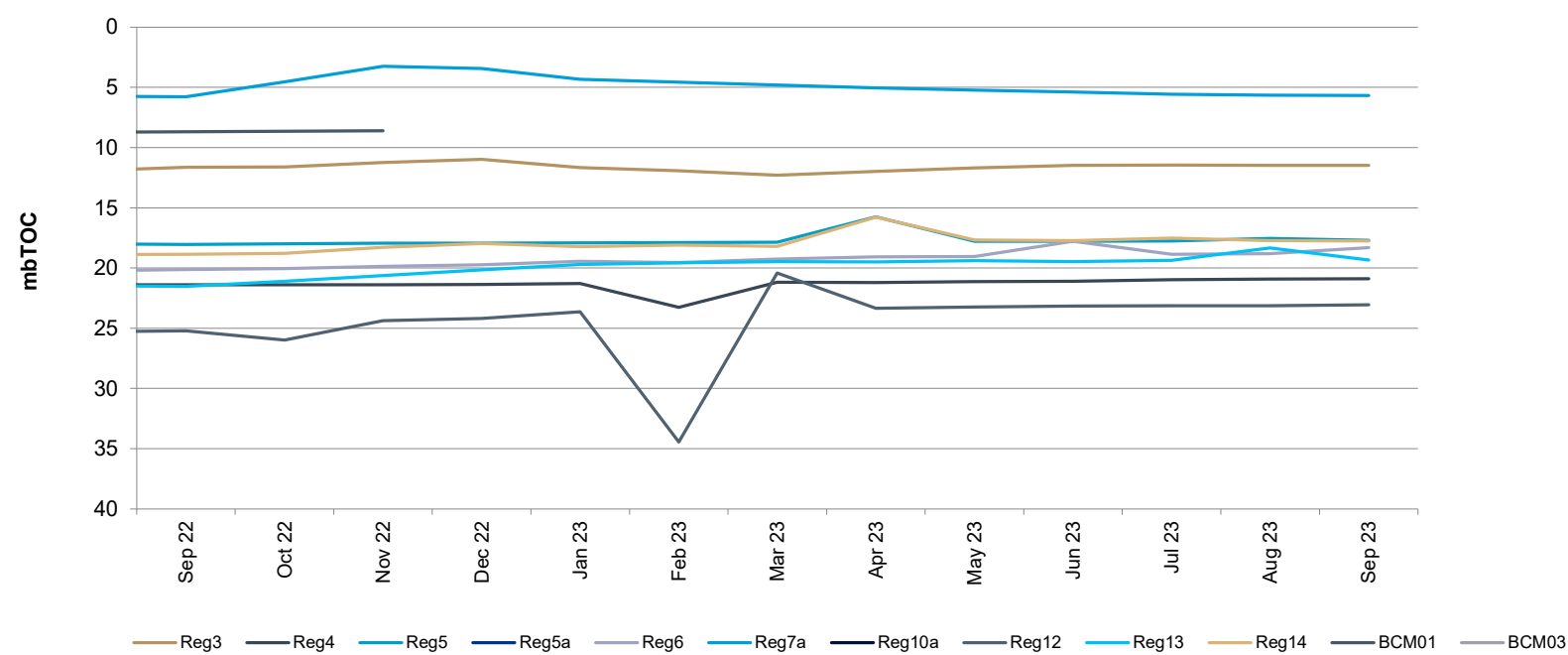
Standing Water Levels

Regional Groundwater Bores



Standing Water Levels

Regional GW - Standing Water Level 2023



Tyre Disposal 2023

- No tyres have been disposed of in 2023

Environmental Monitoring

Q3 2023 - Biodiversity

Maules Creek Coal Mine
October 2023



Biodiversity Offset Tour 30 August 2023

- 1. Revegetation Areas since 2017 and more recent maintenance planting areas;
- 2. a)Kelso Hillside 2023 and b)Riverside 2017 ecological burns;
- 3. Heritage a) Cultural and b)Historical;
- 4. Threatened Flora site;
- 5. Coarse Woody Debris Habitat Augmentation & Monitoring Site;
- 6. Pest Animal Management a)Goats and b)Pig Baiting



Biodiversity Management

Feral Animal Management

Most recent routine Whitehaven Biodiversity Feral Animal Control program (July to September 2023) results were:

- 1,153 out of total 1,767 pigs trapped or baited were from the Maules Offset properties; and,
- 232 out of total 461 Goats harvested were from the Maules Offsets properties; and,
- 158 out of total 282 Canid Pest Ejectors (1080) consumed were from the Maules Offsets properties.

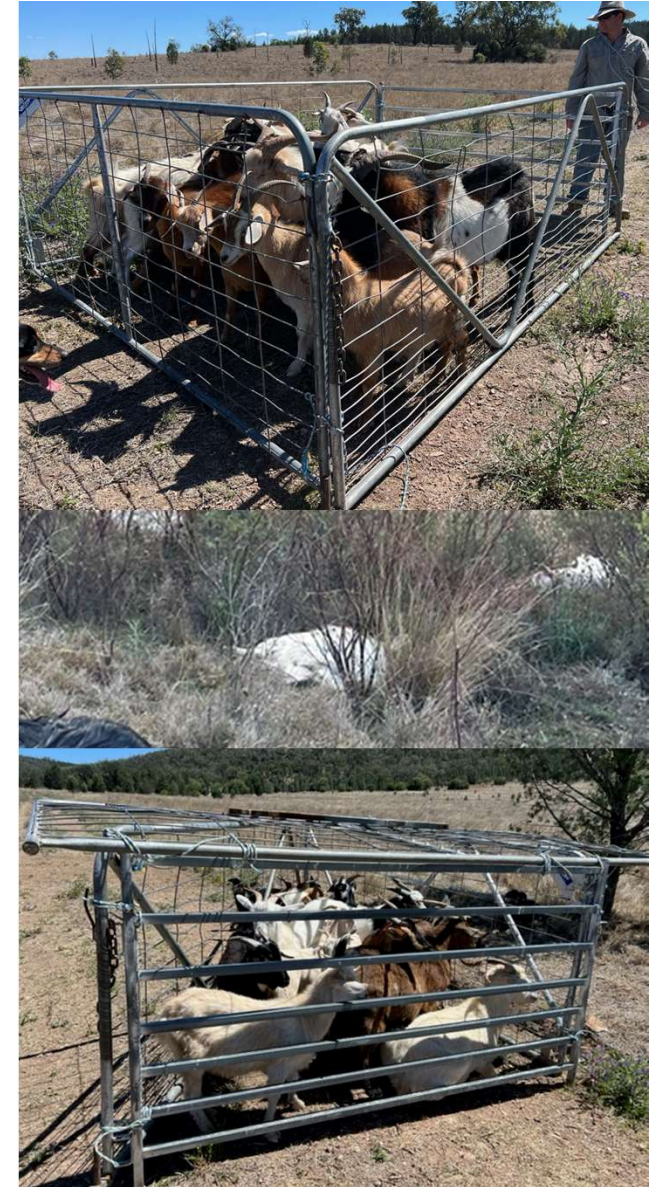
Weed Control

During July to September 2023 the following weed control was undertaken via spot spraying/jetting on the Maules Offset Properties:

125ha of Broadleaf weeds such as Pattersons Curse, Turnip, Saffron Thistle and Variegated thistle has been treated.

5.86ha of Woody Weeds and others, such as Box Thorn, Prickly Pear, and Reveg Holes has been treated.

There was also 41ha of tracks sprayed as part of the track maintenance.



Biodiversity Management

Annual Fauna and Spring Flora Monitoring

Flora Monitoring commenced in September through to November surveying up to 150 plots while Annual Fauna Monitoring has completed Spring Bird Surveys with Pit Fall Trapping next & Microbat Surveys to continue to February.

Revegetation Program

Onavale 240ha project completed native groundcover seeding and 75% completed tree planting of overstorey species targeting Box and Ironbark Woodland communities. Maintenance planting work and tree watering underway.

Fire Break Track Maintenance Program

Earthwork contracting grading existing tracks to mineral earth fire breaks and constructing new fire break tracks on Additional Offset properties.

Upcoming Biodiversity Projects and Works

Continue Spring Flora Monitoring Program.

Continue Annual Fauna Monitoring Programs.

Monthly Pest Animal Management Program October to December 2023 to continue.

Continued Seasonal Weed Control Programs.

Complete Tree Planting at Onavale and continue Tree Watering program.

Quarterly Threatened Flora Inspections and Programs ongoing.

Continued Fire Break Track Maintenance Program ongoing.



MCC CCC Meeting Approvals Update

Maules Creek Coal Mine
October 2023



WHITEHAVEN COAL

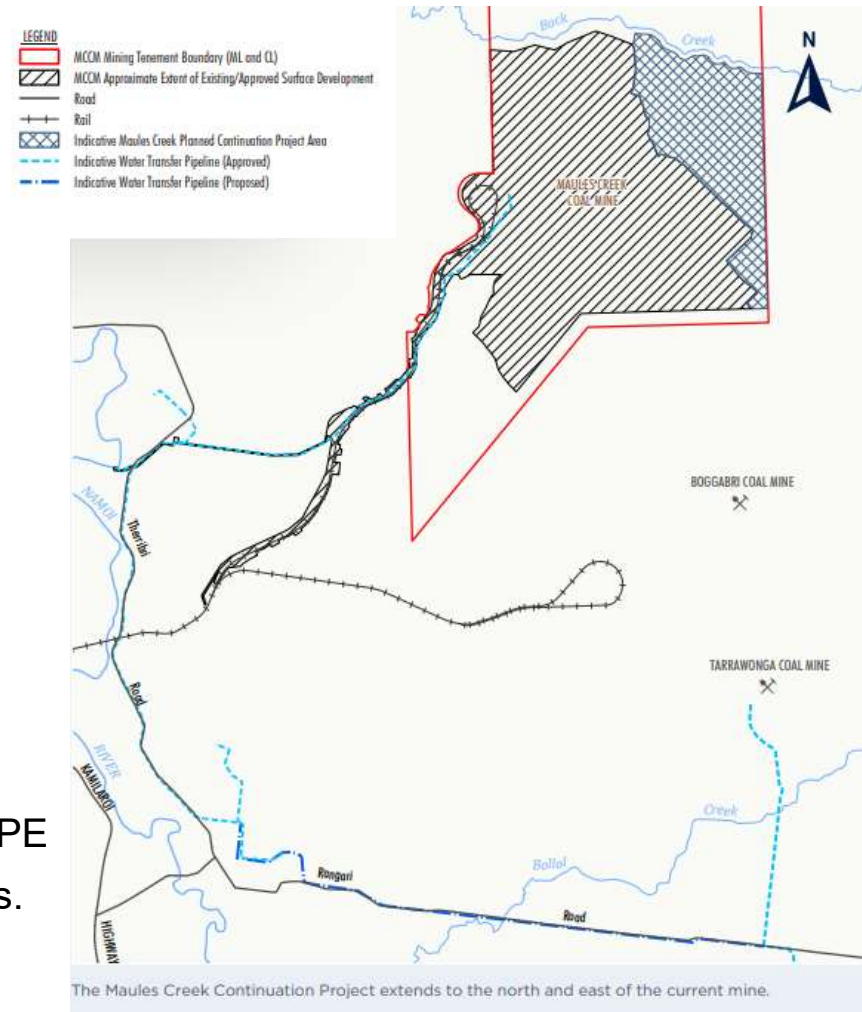
Approvals

Continuation Project EIS

- Environmental studies/modelling and community consultation ongoing.
- Scoping Report lodged with DPE in October 2023.
- SEARs expected by end of 2023.
- Scope of all environmental assessments to be reviewed upon receipt of SEARs.

Modification 9 – BOS and ETL

- A Response to Submissions (RtS) report will be provided to DPE responding to agency, organisation and individual submissions. Submission of report timing extended to end of 2023.



Autonomous Haulage System

AHS Update

Maules Creek Coal Mine
October 2023





AHS Operations



The Autonomous Haulage System (AHS) at Maules Creek are operating up to 2 x EX8000 excavator fleets, with a total of 20-24 autonomous trucks operating at any one time. The AHS also supports Manned Instrumented Trucks (MITs) inside the Autonomous Operating Zone (AOZ), where a truck operator will move through the AOZ carrying coal or other material to an out-of-AOZ dumping area while interacting with Autonomous Haul Trucks (AHTs).

The AHTs are currently completing a 9km round trip haul, averaging 42 minutes per haul cycle. This is creating a large benefit for the entire operation, assisting in times of labour shortages and supporting an efficient approach to haulage at Maules Creek Coal.

The Hitachi AHS teams have successfully executed 2 x software updates over the last 4-6 weeks which have improved System reliability and consistency for MCC Production. The MCC AHS Project team are working on the release and control plan for a large release of new features and further System improvements in November 2023.

FACT: AHS at Maules Creek has passed 100,000 hours of operation.

FACT: Over 200 people are trained and competent in AHS operations at Maules Creek (In-pit, Mine Control and Engineering teams)

DID YOU KNOW: In AHS, there are Excavator, Dozer, Grader, Water Cart and Service Cart operators, along with AHS Controllers, AHS Builders (Map Builders) and multiple Engineering roles. We're continually upskilling our workforce when they are introduced to AHS operations at Maules Creek Coal.



Hitachi Technical Updates

Old issue – AHT (Autonomous Haul Trucks) are very conservative in their turning radius at a loading or dumping area.

New Feature – New soon to be released features will allow the AHTs to take tighter turning radii allowing for optimised path generation in these work areas, decreasing the time the truck takes to complete its haul cycle.

Old issue – Trucks could only tip in a bay once before it had to be reopened by an AHS dozer operator

New Feature – A new feature will allow the AHS dozer operator to set up to 5 x loads from an AHT to be tipped in the 1 bay. This saves a considerable amount of time and confusion when working large tip heads, providing more time for the AHS Operator to focus on their work area and their surroundings.

Community

Maules Creek Coal Mine
October 2023



Community Investments

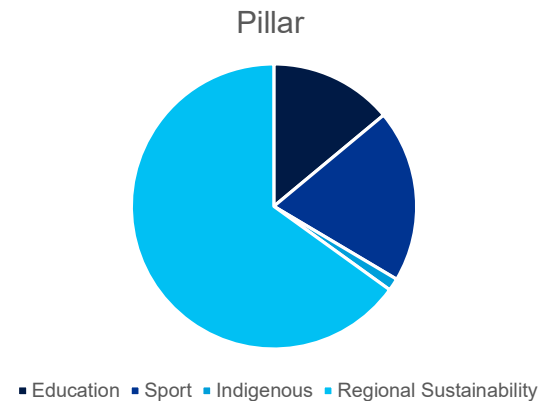
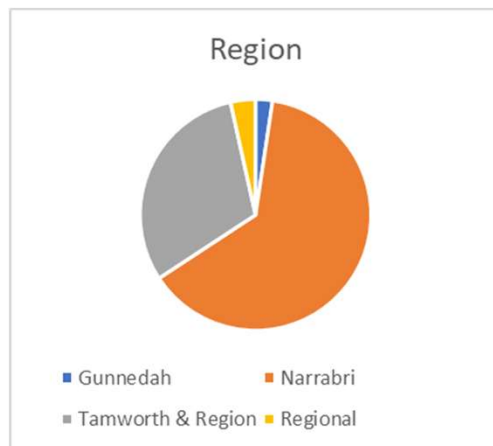
Whitehaven continues to support the local Community with donations and sponsorships.

More information on Sponsorships and Donations can be found at:

<https://whitehavencoal.com.au/sustainability/community/donations-sponsorships/>

Donations/ Sponsorship July 2023 – September 2023 **\$71,575.32** spent in the local community.

Highlights: St Xaviers Narrabri – New school playground, Quirindi Show Society - Sponsorship of the PBR rodeo, Quirindi NAIDOC celebrations



Thank you

Maules Creek Coal Mine
October 2023

