



<b>OVERVIEW</b>			
Meeting	Community Consultative Committee		
Date	14/02/2019	Time	9.15am
Venue	Boggabri Coal Training Room		
Chairperson	David Ross		
Presenter	Daniel Martin		
Attendees	Sarah Torrance (ST), Geoff Eather (GE), Hai		
	(CC), Kerri Clarke (KC), Ros Druce (RD), Mit		er Forbes (PF), Daniel Martin
	(DM), Hamish Russell (HR), Tim McDermot	t (TM), Ray Balks (RB)	
Apologies	Robert Kneale (RK)		
Next	Thursday 16 <sup>th</sup> May 2019, 9am at the Bogga	ıbri Golf Club	
Meeting			
ITEM		AGENDA	
ITEM 1	Apologies	AGENDA	
1	Apologies		
1 2	Apologies  Declaration of Pecuniary or other Interests		
1 2 3	Apologies  Declaration of Pecuniary or other Interests  Confirmation of previous minutes		
1 2 3 4	Apologies  Declaration of Pecuniary or other Interests  Confirmation of previous minutes  Business arising from previous minutes		
1 2 3 4 5	Apologies  Declaration of Pecuniary or other Interests  Confirmation of previous minutes  Business arising from previous minutes  Correspondence		
1 2 3 4 5 6	Apologies  Declaration of Pecuniary or other Interests Confirmation of previous minutes Business arising from previous minutes Correspondence Company reports and overview		
1 2 3 4 5 6 7	Apologies  Declaration of Pecuniary or other Interests Confirmation of previous minutes Business arising from previous minutes Correspondence Company reports and overview General business/questions		

## **Discussion Items**

#### 1. Apologies:

See above

# 2. Declarations of Pecuniary Interests:

(RG) declared that his property is located in the zone of affectation plus leasing joint mine owned land. (DR) declared that he is paid a fee for his chairing services.

# 3. Acceptance of previous minutes:

All members moved and endorsed previous meeting minutes.

# 4. Business from previous minutes:

DM - detailed the actions from the November CCC meeting. CCC members present, received a copy of the map for Biodiversity Offset Area and regional east-west wildlife corridor and written responses to the questions given to the hydrogeologists from AGE in August 2018.

ST – informed the members that an application to the Narrabri Shire Council for site access signage had been lodged with RMS. Signage will be aligned with Maules Creek signage.

DM – updated the members that comments have been received regarding the Regional Water Strategy and are going through the process of responding and resubmitting to regulators.





PF – informed the members that BCOP is committed to the Early Learning Facility in 2019. The plans are with Narrabri Shire Council (NSC) and were lodged in January. Moving forward from 2020, BCOP will be budgeting for three houses a year.

CC – asked if BCOP had received a timeframe from Narrabri Shire Council?

PF – replied that there has been no timeframe given.

MN – Asked how many houses altogether?

PF – Informed the members that as per the project approval there is 10 in Boggabri and 20 in Narrabri. It has been agreed with NSC that the Early Learning Facility.

CC – asked if both Narrabri and Boggabri will have equal focus?

PF – Boggabri will be the first focus.

Questions were asked regarding the Wildlife Corridor – This to be discussed at the next meeting. BCOP is developing corridors in BCOP offset areas – east to west.

PF – ran through slides for sound levels. He explained the difference between Sound Power (weighted) Level (SWL) – how much noise made, and Sound Pressure Level (SPL) – how much you can hear depends on noise and distance from the source. At the end of 2017 when Downer left site, a large amount of new plant came to site. All plant was attenuated to the – SWL's.

PF - explained that some plant is generating noise outside the model (SWL's) but are producing less noise at receptors (SPL) than in the predicted model. 2010 modelling was conservative. Specifically, sensitive receivers are not being impacted by noise.

KC – asked what the difference is between static and dynamic testing.

PF – explained that; static – a stationary test (parked), dynamic – a drive by test with ground monitoring for loaders and ramps, all testing is conducted to a standard

DM – explained that the testing can be undertaken going up or down a ramp and the truck can be either loaded or unloaded to see the outcomes of different scenarios.

PF – pointed out on the map the three-attended night time noise monitoring locations.

DM – explained to members that BCOP have used many mitigations to reduce the noise generated by trucks with no change to results at sensitive receptors – due to the low noise levels at these receptors. Mitigations such as fitting attenuation packages (eg this may include heavy noise doors) reduces payloads and cause other environmental impacts such as extra diesel burning and increased tyre wear. Fitted noise kits are constantly checked eg noise doors – noise levels can increase over time with age of machinery, these then may need to be managed.

MN – informed the group that he had heard that due to costs, some places are taking the equipment off the plant until there is a noise impact and then will refit the packages.

PF – confirmed that is not the case at BCOP.

MN – asked if a tour can be organised to see some plant (ie trucks) and attenuation equipment as well as another look at rehabilitation areas?

\*\*BCOP – to organise field trip for the 15<sup>th</sup> August 2019 after the meeting.

KC – asked if BCOP was looking at changing the approval to reduce the additional costs like the extra fuel burning and tyres.

PF – Yes, BCOP was been working towards changing the sound requirements in the future. having the approval conditions modified to reflect the SPL at receivers.





HR spoke to the standing water levels of surrounding bores chart. He explained how the chart works and what it is being represented. He also pointed out the locations of the bores being displayed.

HR explained that prior to 2018 there would be a general decline to bores and AGE say it is due to an absence of rainfall and low flows in the river.

HR pointed out that Bellvue is the monitoring bore for Daisymeade bore and Victoria Park and Cooboobindi monitoring bores are located very close to the Victoria Park and Cooboobindi production bores. That is why the chart shows such dramatic changes in groundwater levels when the production bores are pumping and quick recharge patterns when no pumping is occurring. Monitoring Glen Hope bore was at 10m and Bellvue at 12m with a decline of water level in bores at 20-60cms.

HR explained to the members that after a neighbour complained to BCOP that they believed their bore had been severely impacted by the mine an assessment was undertaken at the neighbour's bore to determine if BCOP had any impact by pumping from the production bores. As a part of the process BCOP offered make good provisions to the neighbour by providing water and to installed real time data loggers and manually dipped surrounding bores. HR explained the pumping regime for the assessment where pumping occurred for 20 days then stopped for four days. Explained that where a drawdown was experienced, there was a 90% return within a day and back to 99% after that. Bore level has dropped 30-20cm – the bore itself is not deep enough and neighbour's water issues determined not to be caused by the BCOP.

MN – asked what the depths of the bores?

HR – gave the depths of the bores and explained that it can vary depending on the age of the bore and the alluvial depth. Victoria Park is 50-60 m deep

KC – asked if the position of the bore affects the amount it is impacted?

HR – explained that bores in close proximity will show greater drawdown affects from another bore pumping.

KC – asked how close the bores that are claiming to be affected are?

HR – asked RG how far would it be?

RG – informed the members it would be about a kilometre.

KC – asked about the large dips in Victoria Park and Cooboobindi bores?

HR – Explained what periods the production bores were being used and could not speculate whether other users of the aguifer were pumping or not.

CC – asked RG if he had a bore of Barbers Lagoon?

RG – replied yes, he does.

KC – asked what is the very large recovery depicted on the chart?

HR – explained the recent release from Lake Keepit and went on to explain what happened two years ago when water was released from the dam and there was no water observed in the river when it got to BCOP's pumping point. The reason behind this was due to the water having to fill underground aquifers before it continues downstream. The water that is released needs to be of high volume to reach the Boggabri area.

CC – asked what happened around January 2019?

HR – informed the members that BCOP was not pumping at this time and it may have been other users of the alluvial aquifer.

CC – asked when was the last time BCOP pumped from the river?

HR – explained that it was during the November 2018 release. No pumping since late November to the present.





HR – explained that the distance from the Glenhope bore from the Victoria Park production bore and Wilberoi East is around 1.6km.

RG – explained to the members that his bore had not dropped in the last 20 years and have lost most of their bores when irrigators came to the area. None of which have offered to make good. He continued to tell the members that he has neighbours that are currently pumping while he is carting in water.

CC – asked if bore level fluctuation is a common occurrence?

RG – replied yes, it is.

MN – asked for some clarification of how deep the bores need to be?

HR – explained that aquifers change in depth, thickness and geological conditions which all determine where and how plentiful the bore will be.

CC – mentioned that herself and MN missed the AGE presentation and asked if they could get a copy of it. BCOP – to provide a copy of the presentation.

### **Correspondence:**

## **NSW Department of Planning & Environment**

MOD 7 response to representations
DoPE referred to IPC

# **NSW Department of Planning & Environment Resources Regulator**

**MOP Amendment Approval** 

## **Department of the Environment and Energy**

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#### **Environment Protection Authority (EPA)**

Approval to surrender EPL20404 Forest View Quarry Submission of EPL20404 Annual Return Submission of EPL 12407 Annual Return

# **Letter from Maules Creek CWA**

Letter from local community member regarding loss of water on their property.

# **NSW Department of Planning & Environment**

 MOD 7 - coal area change for BCOP coal access and for coal samples to be moved by road was submitted in 2018 and was referred to the IPC. DoPE uploaded MOD 7 to the website for submissions.
 Representations were made and BCOP are commenting on these representations.

RD – MOD 7 is now with Independent Planning Commission (IPC).

DM – the IPC have asked the DoPE to forward representations to BCOP for comment. Only 5 of the 27 representations have been shared, BC didn't see any of the representations before IPC asked permission to share these with BCOP. IPC have asked for more information.

RD – asked if the final decision is up to the IPC?

DM – replied yes.

RD – asked why was it referred to the IPC?





DM – replied that it is unusual to have IPC approval. DoPE can refer projects to the IPC for determination BCOP is unsure on why it was referred, maybe due to the upcoming election. Mod 7 is available on the website.

PF – informed the members that the DoPE have recommended MOD 7 for approval and asked the IPC to also rule.

RD – asked if the community is privy to the changes to MOD 7?

DM – Clarified that no changes have been made to the Mod 7

## **NSW Department Planning & Environment Resources Regulator**

MOP Amendment approved.

## **Department of the Environment and Energy**

Nil

#### **Environment Protection Authority (EPA)**

- Approval to surrender EPL20404 Forest View Quarry
- Submission of EPL20404 Annual Return
- Submission of EPL 12407 Annual Return

RD – asked if members could be given handouts of the presentation prior to the meeting to write notes against.

BCOP – will do this moving forward.

1. Company Reports & Reviews:

#### Presentation

## **Noise Monitoring:**

DM – As mentioned at the November 2018 CCC meeting, attended noise monitoring is only required at – Sylvania, Picton & Barbers Lagoon. December 2018- February 2019 monitoring has been conducted. No exceedances recorded for night monitoring December 2018, January and February 2019 – kept under 35 criterion, LAeq 15 minutes.

KC – asked if the monitoring breaks it up into the different noise frequencies? PF – Yes, it is.

## **Air Quality Monitoring:**

DM – went through the 2018 High Volume Air Sampling results and explained the spike that occurred at both Merriown and Roma (private property) monitors on the 15<sup>th</sup> December 2018. Merriown mine owned property with monitor 200m from gate. Increased annual average due to dry weather events. There was a regional dust event. He informed the members that these monitors run for 24 hours at a time every 6 days.

CCC – general comments about the lack of data collected

BCOP – explained contamination from various sources excludes the use of this data

MN – asked for Tarrawonga Coal Mine (TCM) and Maules Creek Coal Mine (MCCM) to be pointed out on the Air Quality Monitoring map. He told the group that he was out at MCCM on the 19<sup>th</sup> December and saw a lot of dust coming from Boggabri Coal Mine and asked BCOP to explain why.

BCOP – will look into dust levels for the 19<sup>th</sup> December by checking other data.

DM – explained that Merriown and Roma monitors run at the same time.

KC – asked if BCOP owns Merriown property?

DM – replied yes.

CC – asked why there is a reading only in Sept 18 for D4 for depositional dust monitoring?

DM – explained that the samples collected at Greenhills are often contaminated and therefore cannot be counted in the rolling monthly average.

KC – can the location of the dust gauge be changed to provide more useful information?





DM – explained that it is an EPL point.

BCOP are to interrogate depositional dust results.

PF – explained to the group that there is an argument for the value of this method of sampling, but it does provide good historical data.

#### **Ground Water Monitoring:**

DM – explained the continuing groundwater trends in the chart. Bores in alluvium, volcanic and coal seams. Hard rock bores and coal seams ahead of mining are depressurising and leading to standing water levels dropping away. Alluvial bores have been slightly increasing over time since 2009.

PF – pointed out the locations of hard rock monitoring bores compared to alluvial bores. Alluvium bores are constant and seen as relatively flat lines.

HR – explained the depressurising of the deep bores ahead of mining which is causing the standing water levels to drop.

DM – Ground water monitoring – one in alluvium and one in volcanics.

## Water Storage:

CC – asked if BCOP's water storage was charged through bores and what are BCOP's river and bore licences? DM –replied that BCOP has a permanent Zone 4 allocation of approximately 1000 units for the water year with access to purchase supplementary water on the open market. Two river licences – upper/lower Namoi Licences. Will provide data to CCC.

Water storage – 600/580ML at present.

BCOP to provide water licences numbers to members.

CC – asked if BCOP can operate with the current level of water storage?

DM - replied yes

CC – asked how long would the current water storage capacity would last BCOP?

PF – replied twelve months to two years till early 2021. Water is important and we have a strategy to review monitor and continue to manage going forward.

CC – does BCOP have a high security water licence?

PF – replied no. Maules Creek has a high security river water licence.

KC – asked what a high security water licence was?

CC – Priority water - if there is water to be had, you can access the water.

PF – BCOP is dependent on bore licences and not on river allocation.

KC – Does anything happen if other uses are in need of water and you have water?

DM – BCOP is required to scale back production to match its available water.

PF – explained that it is incumbent on BCOP to have no effect on other users of the alluvial aquifer.

KC – asked if BCOP would reduce the amount of pumping to help others that may rely on the same water source?

PF – we are continually looking at options to reduce water usage. Water Management is an important site issue and it has received increased focus due to the ongoing dry conditions.

KC – asked if BCOP couldn't produce, what would you need to control dust etc?

PF – replied that it is definitely weather dependent. The site may use up to 10-12ML per day on very dry days – from up to 8-9 trucks, otherwise 3-4ML per day.

CC – asked if BCOP is using dust suppression product?





PF – replied yes, BCOP is using dust-a-side and another product.

CC – asked if the CCC can get a representative from dust-a-side to talk to the group briefly to give more information?

DM – Replied that there are different suppliers of products and many different products that can be used as dust suppression. Product used depends on soil types and uses soil extenders or soil binders. Explained water saving ability for areas where products can be used. It was floated to the members that HR would be best to give a 10 minute presentation as he has done the research on site at the next triple mine CCC meeting.

BCOP – It was agreed that HR will address the members about dust suppression used on site. BCOP to give members a list of dust suppression products used on site.

## Rainfall

379.4 mm to February 2019

No Comments

#### **Exploration:**

PF – demonstrated on the map the different leases across the site. Exploration on CL 368 and drilling in front of A399 (west).

BCOP to provide a new/better map in the next presentation.

No exploration activity on A355 (off to the left), or ML1755 (south west) during 2019

#### **Community Complaints:**

- Currently investigating feedback from local landholders regarding impact to water supply from ground water bores as a result of the operation of BCOP groundwater bores.
  - Update An experiment has been conducted to determine the effect on landholder water supplies as a result of the operation of BCOP bore field.

The 'Landholder bore groundwater drawdown assessment' by AECOM concluded that:

Landowners bores have not been drawn down by pumping of the BCOP borefield and in accordance with the Aquifer Interference Policy it has been demonstrated that there is no unacceptable drawdown and make good provisions do not apply.

A Peer Review of the AECOM drawdown assessment, by James Tomlin of Australasian Groundwater and Environmental Consultants Pty Ltd *agreed with the conclusion that pumping from the Boggabri mine borefield is unlikely to have impacted the landholders to date.* 

CC – asked if BCOP has looked at the bore the neighbour believes has lost water?

DM – Replied that BCOP was advised to install a logger on that bore, which was declined by the owner. BCOP was however, given access to manually dip the bore.

CC – asked if BCOP did manually dip the bore?

DM – replied yes.

RD – Read a letter from the bore owner to the CCC members. The letter was dated the 14<sup>th</sup> February 2019 and had not been received by BCOP prior to the meeting. Letter expressed disappointment in BCOP and felt BCOP was indifferent to the problems. Increased dust, increased noise from train line. Planting crops have become problematic with decreasing available water leading to loss of farm production. Brighton bore water levels dropped to 6.5 feet from 2.5 inches. Unable to water stock so stock sold. Received 1-3 loads of water from 6





April to 28 December which was cancelled after rain. Offer of installing digital monitoring was declined. The water report stated BCOP not responsible and aquifer trigger not applied.

CC – asked if BCOP has done manual dipping on David Gillham's property.

DM – replied that electronic loggers were placed into that well.

CC – asked were there any impacts on that bore?

DM – informed the members that the bore that was allegedly impacted was a shallow bore that is just touching the top of the aquifer. Therefore, bore easily affected by low rainfall and low river, etc. From our records of manually dipping there has been an approximate drop in water level of ~60cm.

CC - where is the well?

DM – replied approximately 30m from the from the Brighton house. The hydrogeologist suggested the loggers to get as much information as possible. One dip every 48 hours will not give as much information and it will not be as accurate.

DM – ensured the members that BCOP will continue to openly engage with the neighbour.

MN – asked if the neighbour had brought this to the mines attention prior?

DM – replied yes, a complaint was made in August as shown on the complaints graph. BCOP provided water as required under the project approval conditions until it was determined through scientific investigation that BCOP was not affecting their bore.

RD – expressed that often it is the person who is being impacted that has to prove it. The mines have access to a number of resources to help prove this and the landholder does not.

DM – explained that BCOP investigated the impact.

RB – informed the group that BCOP has offered access for the landholder to the hydrogeologists. The landholder has asked some questions that BCOP has been unable to answer so they have been referred to the hydrogeologists.

RD – expressed the importance of open and honest communication between the mines and those impacted and it needs to be improved.

DM – explained that BCOP acted on these concerns promptly and offered to install logging device on the property but the offer declined by the landowner. Manual monitoring is possible but continuous loggers are better for data collection.

RG – told the group that he has never received make good offers from his neighbours that are affecting his bore. It is a big thing that the mine has made good.

RD – asked that communication stay open and honest between the two parties.

RB – agreed that good communication is critical in this situation. BCOP has opened the door to look into other options. The report is only a part of the journey and not necessarily the destination. Conversations between the parties are still continuing.

KC – asked if the landholders were still getting water supplied?

DM – replied no, not since it was requested to cease due to rainfall and then the results from the assessment were received.

KC – will you provide water to the neighbour if needed?

BCOP – will provide more water if requested. Happy to keep negotiating and keep open communication.

BCOP - Blast complaint in May 2018

BCOP - Dust complaint in April 2018





DM – explained the traffic complaint in December 2018, offender unknown (may not have been related to BCOP). In response BCOP reiterated to crews and staff of the traffic rules regarding driving to and from work and the routes that are to be taken and those not to be taken. Employees and contractors taken to task about road behaviour.

PF – added that previously when traffic complaints about certain contractors have been received, BCOP has followed it up with the contractor and changed behaviours in a positive way.

#### 2. General Business

Nil.

Community sponsorship 2018 \$130 510 -2019 process has commenced.

#### 3. Other Business

MN - email questions to chair

asked how much water did BCOP give to Tarrawonga Coal Mine (TCM)? Does BCOP have the water to give? And he had heard that MCCM and BCOP are both giving water to TCM.

DM – replied that last year approximately 200ML was transferred from the Namoi river to BCOP and then onto TCM.

RB – explained the water allocation process and that BCOP did not give any of its allocation to TCM, it just provided the infrastructure for TCM to access their own water allocations from the river. Explained that each mine has water allocations and there is a 3 mine complex approach where each mine is required to assist the other where possible. Provided pump, pipeline and temporary dam storage for WHC allocation from river and then pumped across to TCM.

MN – Asked if BCOP is assisting MCCM to get water to Vickery?

DM - replied No.

RD – asked if the process of transferring the water was free?

RB – explained it was of a cost recovery basis. TCM was only charged what it cost BCOP to provide the service.

MN – asked how much water is in the pit? How many animals are making it down into the pit to drink and are they being killed?

DM – BCOP have not had any reports of animals making their way to the pit to drink the water.

RB – explained that the only rain water captured in pit is what falls in the pit. BCOP has little to no inflow from open pit faces. The water is pumped to outside of pit storage dams around the site after rainfall events as water interferes with operations. Only a swimming pool size area of water left. Occasionally there will be a kangaroo in the pit but supervisors will often try to lead the animal out of the pit and out of harms way. No capture and intentional killing occurs.

KC – asked do you get birds in the pit?

DM – replied not usually. They tend to hang around the dams outside and near the administration areas.

KC – asked if the water quality is good? No toxic dams, has sediment.

PF – replied yes.

Namoi Regional Air Quality Advisory Committee (NRAQAC)

CC – gave an update on the NRAQAC.

It is an overarching committee for the whole area not just Boggabri. The committee has been talking with Leanne Graham from OEH who has been pulling together a quarterly report for the region and Cath has taken it on to help distribute the information through CCC meetings.

- Air quality for the region was good for the past quarter although there were dust events.
- Real time monitors are operating, Gunnedah and Narrabri





A Boggabri monitor is on the agenda. The cost of the monitor would wipe out the Trust budget so the committee is putting it to the State government to pay for the monitor.

CC – expressed to the committee that she was gaining a greater understanding of the different types of dust and emissions. It is the real time monitoring that will benefit this area and it will benefit the community to be better aware.

DR – to provide links to the committee for NRAQAC information.

GE – expressed concerns again for the idling locomotives in town.

DR – explained that he and Lindsay Fulloon are still trying to organise someone from ARTC to come and talk to the joint CCC.

RD – asked if anything had been followed up regarding the Tyre Stewardship Australia recycling program mentioned in the MOD 7 CCC meet in September?

PF – explained that he had spoken to Bridgestone and they were a part of the program but nothing else has been followed up.

RD – asked why can't the large off road tyres be recycled?

PF – explained that it is likely to be technology limits. There were some older trials, but we are not aware of anything more recent. Current industry standard is to dispose of heavy earth moving tyres into the pit as these are not currently recyclable. Light vehicle tyres – recycle data available in annual review.

RD – asked if Baradine still the custodians of the Leard State Forest?

DM – explained that Forestry NSW are the custodians of the land and that there is an office in Baradine and Dubbo. The people that BCOP have dealt with have always been located at Dubbo.

ST – read a letter from the Maules Creek Country Women's Association to the members about the Tier 1 critical habitat rating of Leard SF and asked BCOP to stop clearing the Leard SF.

BCOP to respond to the letter in writing.

MN – asked if the Vickery Project is claiming parts of your biodiversity offsets that BCOP shares with Whitehaven Coal?

DM – explained no. Boggabri and Whitehaven Offset properties are owned by either Boggabri Coal, Whitehaven Coal with some jointly owned. Offsets are not jointly claimed.

MN – told the group that he had heard in the community that it will be shared with Vickery.

Discussion regarding the existing and alternate wildlife corridor was had.

DM – under the project approval BCOP can seek to mine the vegetated corridor but will need to provide an alternate corridor that will be to the satisfaction of the Secretary. The void will be backfilled so it is free draining. RD – will there be a void at the boundary of BCOP and MCCM?

DM – replied no it will be backfilled to be free draining. It will not be at current surface level, there will be a slight depression.

RB – BCOP can provide a concept of the final void based on the 2010 EA.

KC – asked if MCCM are able to clear their 250m of the corridor if BCOP cannot provide a 500m alternative corridor?

RB – That would depend on MCCM approval conditions.

KC – asked if BCOP's commonwealth offsets line up with Whitehaven Coal's?

DM – Some of our offsets share common boundary but are not shared in terms of value

KC – asked if BCOP's offset have been finalised?





DM – In perpetuity agreement not currently in place. Boggabri Coal owns all the required offsets and are managing them in line with the Biodiversity Management Plan and committed to the agreement.

BCOP will organise for Alex Cockrill from WSP to give an overview of the biodiversity offsets.

Members to provide questions prior to this meeting.

DM – Explained to the members that the areas are established, managed and the conservation covenants process has started. A third party, along with state and federal government have agreed that the offsets are like for like. BCOP has committed to getting covenants. State government are stalling the process. BCOP is limited by mechanisms to secure lands for in perpetuity.

RD – asked when BCOP thinks it will be finalised?

DM – planting 3 500 ha a determination of Mod 7 needs to be made and we are unsure of the timing. Waiting for IPC determination to decide on option.

KC - how much offset area is like-for-like?

DM - 7000 ha

PF – explained that on the ground the areas we established some years ago.

RD – expressed that the community is struggling with the process.

DM – explained that this offset package meets the project approval conditions – conservation/stewardship agreement to ascertain like-for-like.

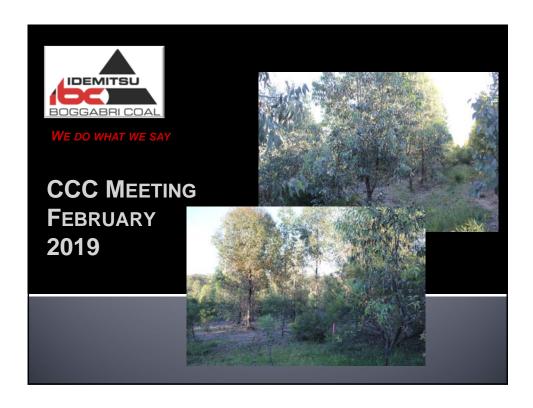
DR – closed out the meeting by giving the dates for the rest of the 2019 CCC meetings.

#### 4. Next Meeting

Thursday 16/05/2019 at 9am at Boggabri Golf Course

Meeting Closed at 12.15pm.

Actioned against	Action to be done
ВСОР	Organise a field trip for the August meeting for members to see sound attenuation equip on plant and visit rehab areas
ВСОР	Provide a copy of the AGE Hydrogeologist presentation from August 2018 to members
ВСОР	Provide presentation handouts to members prior to the commencement of CCC meetings
ВСОР	Look into site dust levels for the 19 <sup>th</sup> December 2018.
ВСОР	Provide members with water licence numbers
HR	Give an overview of dust suppression products used on site.
ВСОР	Provide members with a list of the dust suppression products used on site.
ВСОР	Provide new exploration map in the presentation
DR	Provide link to the NRAQAC website to members
ВСОР	Respond to the CWA letter requesting BCOP to cease tree clearing in 2019.
ВСОР	Provide a concept of the final void based on the 2010 EA
ВСОР	Organise for Alex Cockrill to give an overview of the biodiversity offsets at the May CCC meeting
Members	Provide questions for Alex by the end of March 2019





- Confirmation of record keeping
- Apologies
- Declaration of pecuniary or other interests
- Confirmation of minutes
- Business arising from previous minutes
- Correspondence
- Company reports and overview
- General Business
- Next Meeting



# BUSINESS ARISING FROM PREVIOUS MINUTES

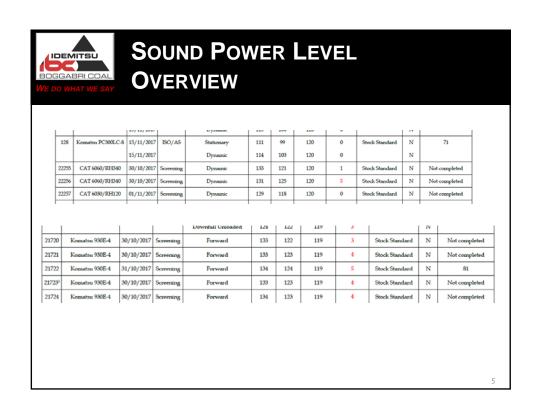
Actioned against	Action to be done
Peter Forbes	To provide at the next CCC an overview of SPL monitoring and equipment noise levels.
Robert Kneale	Investigate within the Narrabri Shire Council what the issue with site access signage on the Kamilaroi Highway.
Daniel Martin	Provide written responses to the CCC members questions prepared for James and Laura.
Daniel Martin	Let the committee know when the Regional Water Strategy is approved and on the website if approved prior to the May 2019 Joint CCC.
ВСОР	Provide charts for alluvial bores standing water levels from outside BCOP in the area at the February CCC meeting
Hamish Russell	Provide an update of the bore monitoring experiment at the February 2019 CCC meeting
ВСОР	Provide Robert Kneale clarification on site access signage
ВСОР	Provide timeframe for housing commitments at the February 2019 CCC meeting
BCOP to action	Concerns of corridor to be addressed in future meetings
ВСОР	Provide a map of the corridors

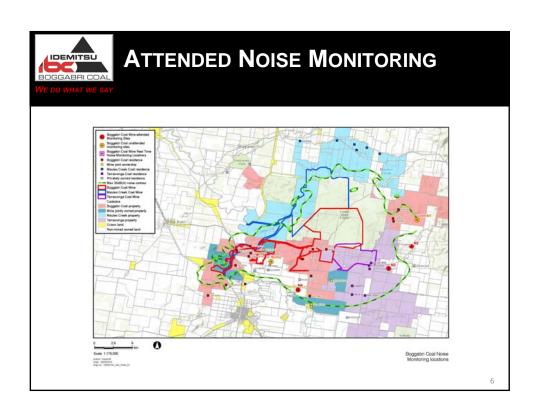


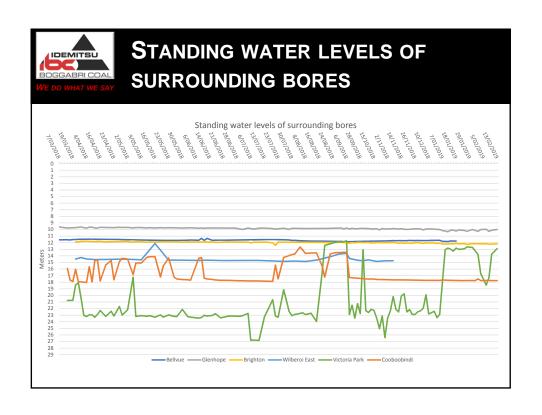
# Sound Power Level Overview

- Sound power (weighted) Level SWL How much <u>noise it</u> makes.
- Sound Pressure Level SPL How much <u>you can hear</u>. This depends on how much <u>noise it makes</u>, distance, weather, topography. This is monitored monthly at designated locations.
- SPL's are low and compliant at receptors (neighbours). See attended monitoring in a few slides.
- SWL for some pieces of plant are in some cases higher than the original modelling (2010 Environmental Assessment) and we are working to reduce these. This modelling was conservative
- New equipment is attenuated to SWL goals

4









## **NSW Department of Planning & Environment**

- MOD 7 response to representations
- DoPE referred to IPC

# **NSW Department of Planning & Environment Resources Regulator**

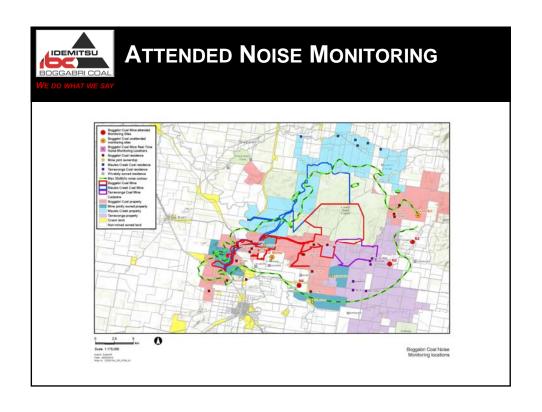
MOP Amendment Approval

## **Department of the Environment and Energy**

Nil

## **Environment Protection Authority (EPA)**

- Approval to surrender EPL20404 Forest View Quarry
- Submission of EPL20404 Annual Return
- Submission of EPL 12407 Annual Return





# ATTENDED NOISE MONITORING

Monthly monitoring conducted in December 2018, January and February 2019.

Night-time monitoring

Carried out in accordance with requirements of the EPL and Australian Standards

There were no exceedances of EPL or Project Approval criteria during the monitoring



# ATTENDED NOISE MONITORING RESULTS – 2018

Attended Noise Monitoring	LAeq,15min Impact Assessment Criterion	Jan-18	Feb-18	Mar-18	Apr-18	May-18	June-18	July-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Goonbri	0	0	32	0	28	29	32	31	29				
Sylvania	35	0	0	0	<25	0	0	<25	0	0	0	0	0
Picton	35	0	0	<20	0	0	0	0	0	0	0	0	0
Barbers Lagoon	35	0	<25	<25	0	0	0	0	0	0	<30	0	<30
Glenhope 84 Warners Road	0	0	0	25	0	0	0	0	0				
Roma Vine Lane	35	0	0	0	0	0	0	0	0				
Arlington	35	0	0	0	0	0	0	0	0				
Roma 2 94 Warners Road	0	<25	0	25	0	0	0	0	0				

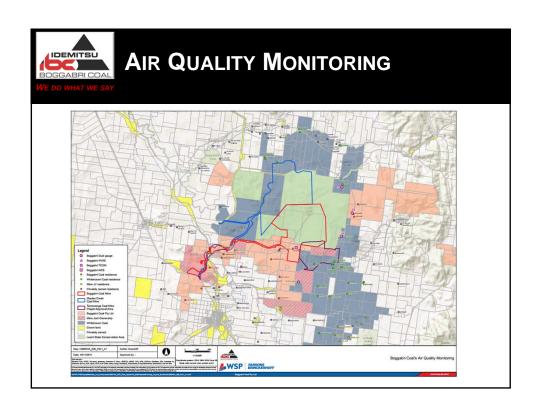
The new Noise Management Plan was accepted by The Department of Environment on the 6<sup>th</sup> September 2018. Attended noise monitoring is now only required at Sylvania, Picton and Barbers Lagoon.

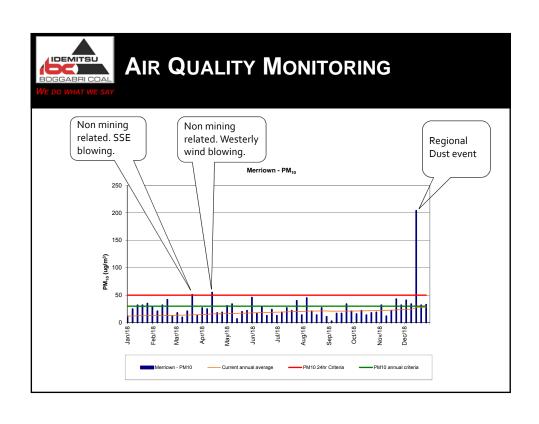


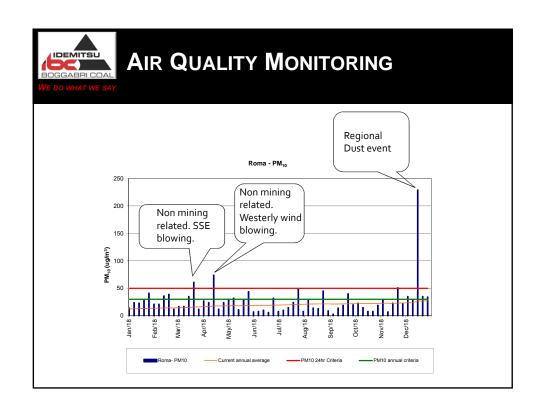
# ATTENDED NOISE MONITORING RESULTS - 2019

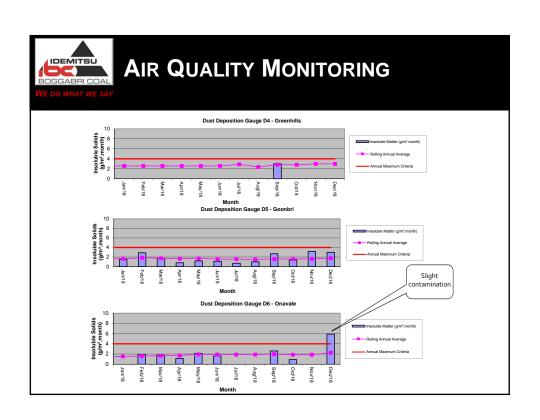
Attended Noise Monitoring	LAeq,15min Impact Assessment Criterion	Jan-19	Feb-19	Mar-19	Apr-19	May-19	June-19	July-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Sylvania	35	0											
Picton	35	0											
Barbers Lagoon	35	0											

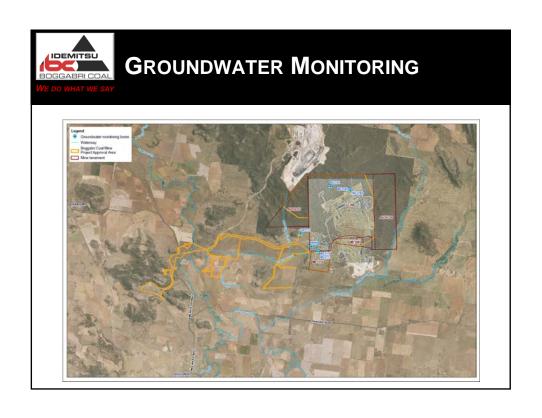
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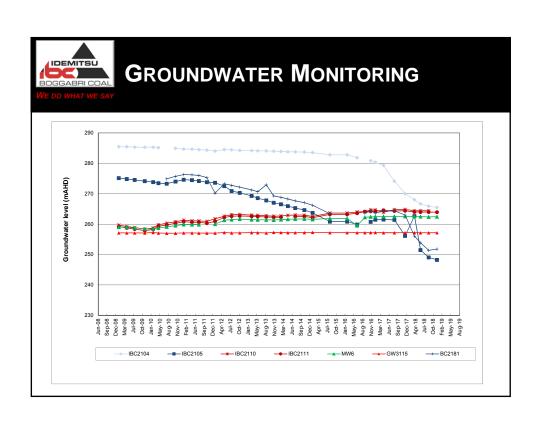


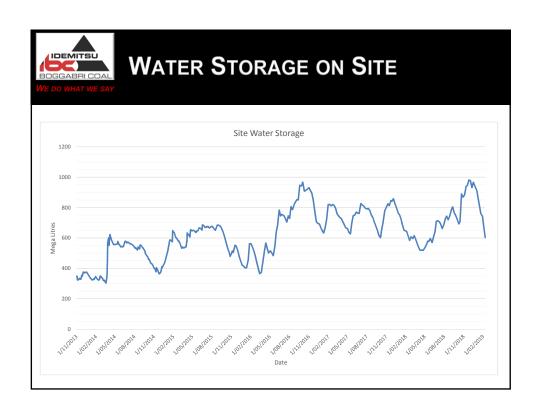


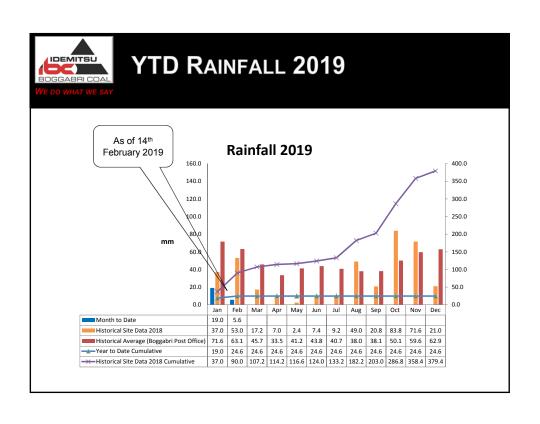






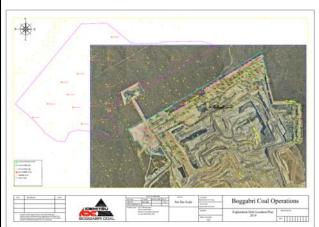








# **EXPLORATION ACTIVITIES**



Exploration activities for 2019 are located on CL368 and A399.

No physical activities to occur on A355 or ML1755 during 2019

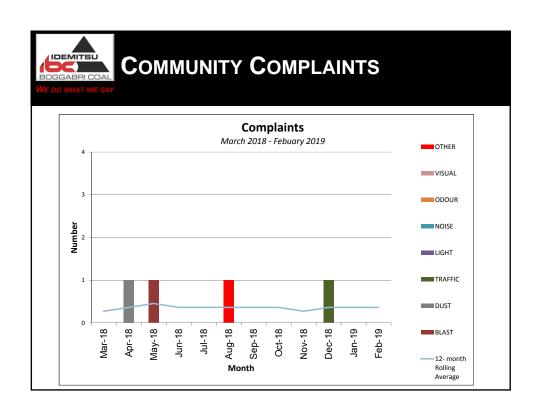


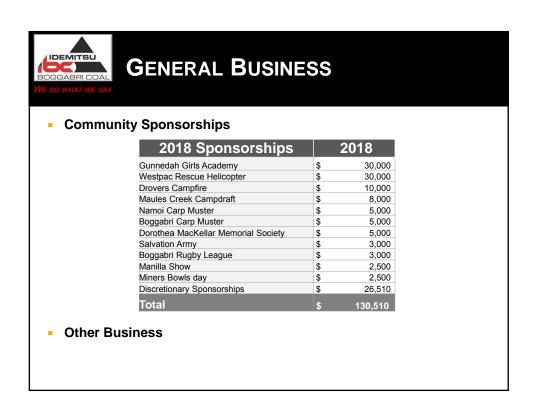
# COMMUNITY COMPLAINTS/FEEDBACK

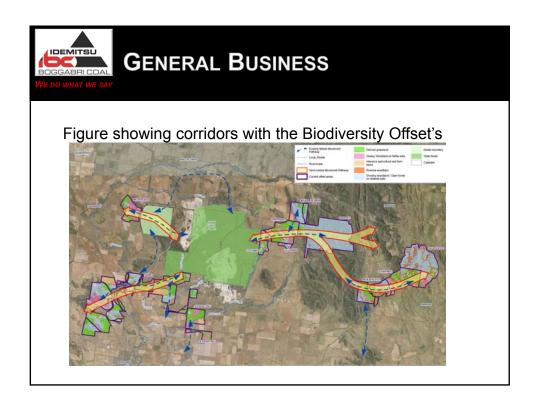
- Currently investigating feedback from local landholders regarding impact to water supply as a result of the operation of our groundwater bores.
  - An experiment has been conducted to determine the effect on landholder water supplies as a result of the operation of BCOP bore field.
- The 'Landholder bore groundwater drawdown assessment' by AECOM concluded that:

landowners bores have not been drawn down by pumping of the BCOPL borefield and in accordance with the Aquifer Interference Policy it has been demonstrated that there is no unacceptable drawdown and make good provisions do not apply.

 A Peer Review of the AECOM drawdown assessment, by James Tomlin of Australasian Groundwater and Environmental Consultants Pty Ltd agreed with the conclusion that pumping from the Boggabri mine borefield is unlikely to have impacted the landholders to date.







# **Boggabri CCC Groundwater Presentation**

Prepared by AGE Consultants 16 August 2018



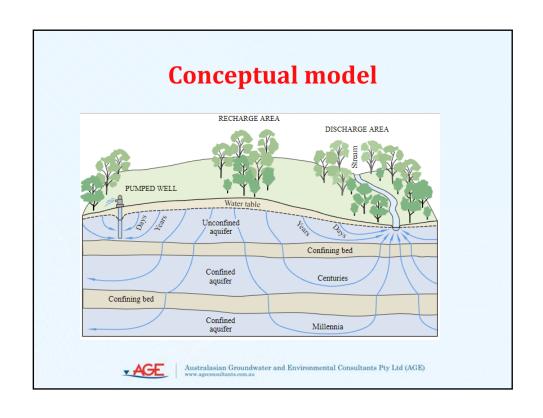
Australasian Groundwater and Environmental Consultants Pty Ltd (AGE)

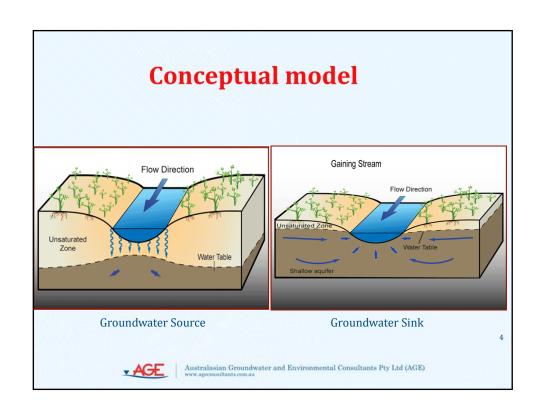
# **Agenda**

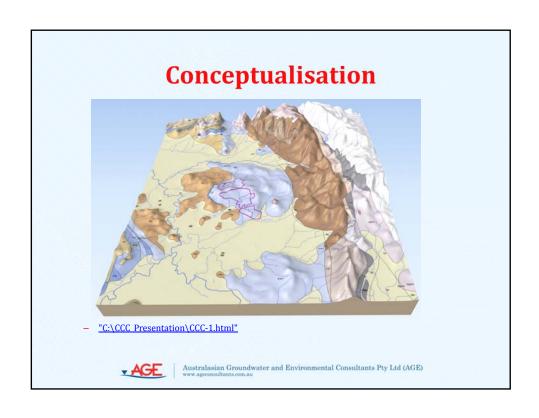
- introductions
- conceptualisation
- monitoring
- modelling
- Namoi Catchment Water Study

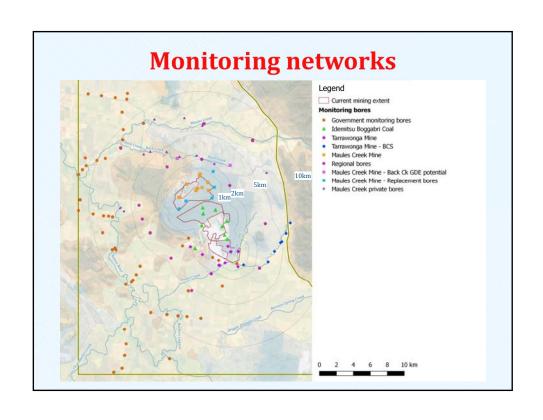


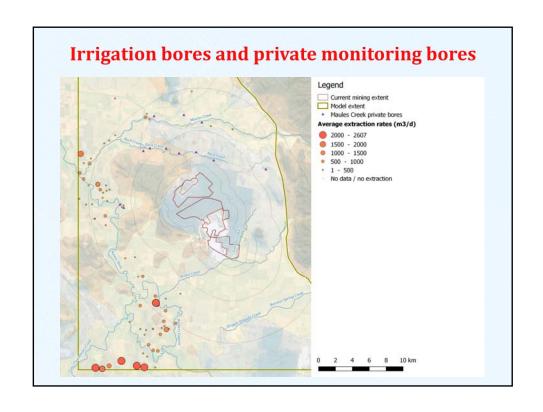
Australasian Groundwater and Environmental Consultants Pty Ltd (AGE)

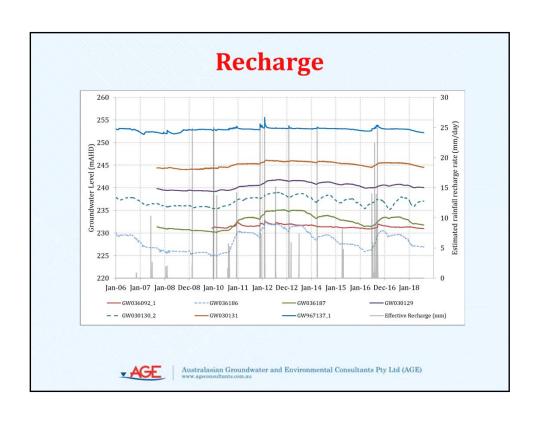


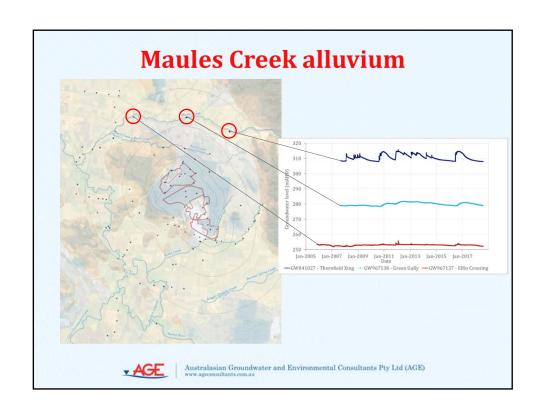


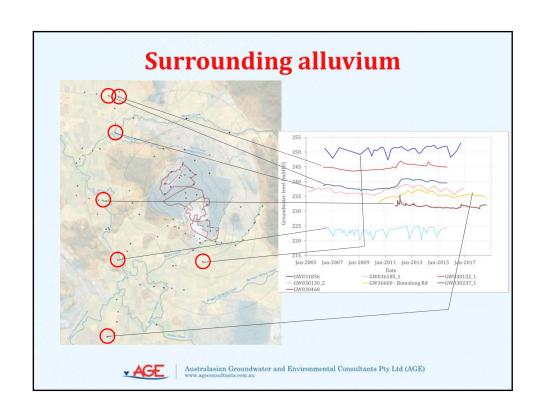


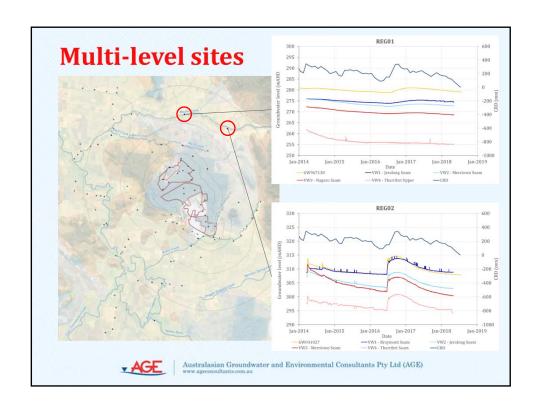


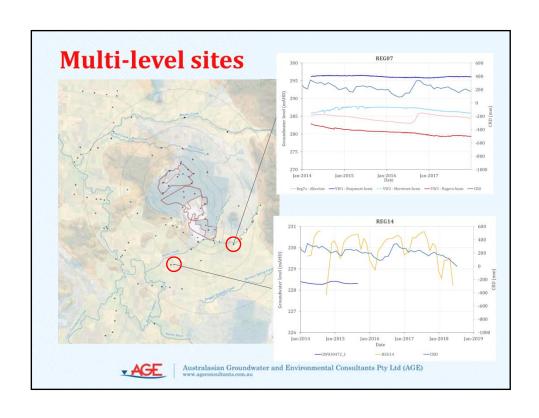


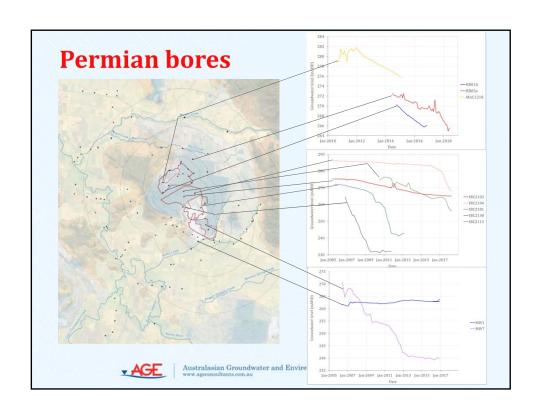


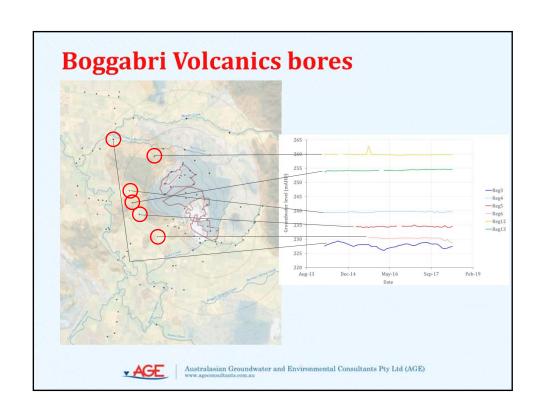












# Sample core low permeability, mainly fracture flow



# **Numerical modelling**

- 2005 Boggabri pre-mining
- 2008 Boggabri extension
- 2010 Boggabri & Maules Creek
- 2012 Tarrawonga Model
- 2014 Maules Creek model updated
- 2015 Boggabri bore field model
- 2016 BTM complex updated

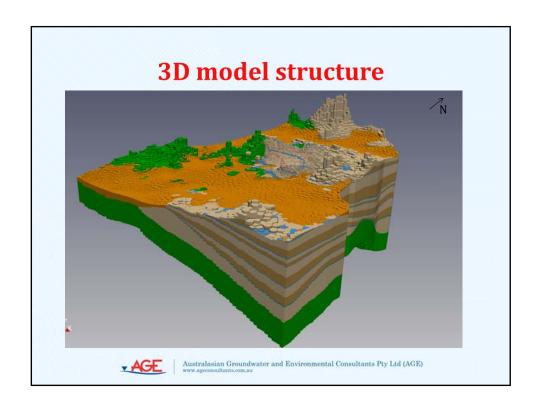


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# **System stresses**

- Inflows:
  - Recharge (or lack of)
  - Irrigation drainage
  - Stream leakage
- Outflows:
  - Bore pumping
  - Mining
  - Stream baseflow
  - Evapotranspiration





Dradicted	pit inflow -	Roggal	ri Mino
Freuicteu	pit iiiiiow -	· Duggat	III MIIIIE

Year	Mine inflow (ML/year)	Porous rock (ML/year)	Zone 4 (ML/year)	Zone 11 (ML/year)
WSP total		23,109	21,302	2,223
Mine entitlement		877.5	953	0
2018	592	521	68	3
2019	513	434	76	4
2020	529	459	66	4
2021	471	399	67	5
2022	495	411	76	7
2023	483	408	67	7
2024	443	371	64	8
2025	406	334	64	8
2026	381	302	69	9
2027	361	280	71	10
2028	331	248	73	10
2029	313	221	81	11



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# **Namoi Catchment Water Study**

- purpose
  - cumulative impacts generated for resources industry
- limitations
  - covered very large area broadly, not localised areas in detail
- updates
  - would not help understand localised impacts any better - local scale monitoring and assessment is superior and already a requirement of approvals



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