

AGENDA

Upper Hunter Mining Dialogue Joint Environment Working Group

UHMD Resource Centre, Upstairs of the Town Square Shopping Centre Suite 1, 159 John Street, Singleton NSW 2330

Wednesday 27 February 2019, 9:00 am to 12:00 pm

Teleconference Details:
Dial-in Info: (02) 8319 9443
Organiser Code: 173-940-29 / Participant Code: 391-652-32

Agenda items		Attachment
1.	Welcome and Apologies (9:00 am)	
2.	Minutes and actions of the previous meeting	
3.	Review of 2018 Forum Outcomes - Project Ideas from Discussion Sessions	Yes
4.	Review of 2018 Forum Outcomes - Feedback from Participant Survey	Yes
5.	Synoptic Plan Review Update	
6.	Update on Emissions & Health Projects	
7.	Update on Land Management Projects	Yes
8.	Update on Water Projects	
9.	Update on Communications Activities	
10.	Update on other Dialogue Working Groups/Committees	
11.	Other Business	
12.	Next Meeting / Close (12:00 pm)	

Agenda Item 2

MINUTES AND ACTIONS FROM PREVIOUS MEETING

DRAFT MINUTES

Upper Hunter Mining Dialogue Joint Environment Working Group Meeting

UHMD Resource Centre, Upstairs of the Town Square Shopping Centre Suite 1, 159 John Street, Singleton NSW 2330

Wednesday 26 September 2018: 9.00 am- 12.30 pm

Attending

Julie Thomas (Chair) Muswellbrook Coal

Bill Baxter Yancoal

Chris Knight The Bloomfield Group

Matt Parkinson AGL Bayswater Power Station
Craig White Bengalla Mining Company

Jonathan Deacon BHF

Cameron Archer Tom Farrell Institute
Hamish Murdoch Singleton Council

Ken Bray Hunter Valley Water Users Association
Monique Meyer Resources Regulator (via teleconference)
Neil Griffiths NSW Department of Primary Industries
Neville Hodkinson Singleton Shire Healthy Environment Group

Ron Fenwick Wambo CCC / Community Individual

Bob Mackie theresource

Craig Milton NSW Minerals Council

Guests

Cate Fisher TAFE

Apologies

Chris Quinn

The Bloomfield Group

Daniel Lewer

Hunter Land Management

Genelle Scotts

Bengalla Mining Company

Glenda Briggs NSW Department of Primary Industries

James Barben NSW Minerals Council

Jim Morgan Wybong Action Group / NSW Farmers' Association

Jo Powells NSW Department of Primary Industries

John Campbell Bengalla Mining Company

John Watson Glencore

Karen Marler NSW Environment Protection Authority

Kris Sheehan BHP

Mark ScandrettMuswellbrook Shire CouncilMark SladeCommunity individualMaryann CrawfordSingleton CouncilMerri BartlettPeabody Energy

Ngaire Baker Mount Pleasant Operation

Nigel Charnock Glencore
Paul Amidy Glencore
Peter Jaeger Peabody Energy

Sarah Withell BHP

Sean Constable Upper Hunter Shire Council
Simon Turpin Local Land Services
Tim Roberts Tom Farrell Institute

1. Welcome and apologies

The Chair welcomed all attendees and noted apologies. Given this was the first expanded meeting of the existing Joint Working Groups as an 'Environment' themed group, members introduced themselves.

2. Minutes and actions of the previous meeting

The minutes from the previous meeting were accepted and the actions arising were addressed for both the Emissions & Health, and Water & Land Management meetings.

3. Rehabilitation and Mine Closure Update

Mr. Milton provided an overview of the various rehabilitation-focused activities underway. Ms. Meyer provided an overview of the government's reforms from a policy and operational perspective, noting the considerable consultation that has occurred throughout 2018.

4. Rehabilitation Principles and Commitments 2017

Mr. Milton provided a brief rundown on the Dialogue's planned approach to developing a Rehabilitation Principles and Commitments annual infographic. Members discussed the draft document included for review, noting this information, particularly trends that have been observed since 2012, would be helpful.

5. Update on current land management projects

Mr. Griffiths noted the follow-on ACARP grazing study that is examining past and present mine rehabilitation across Upper Hunter grazing land as a guide to future research has effectively just commenced, following issues encountered with establishing administration and the drought conditions preventing substantial fieldwork being undertaken. Mr. Griffiths noted that conditions had improved recently, with information starting to come in from the Dialogue's industry partners involved. The data that sites have been able to make available has been varied, and some follow-up work will be needed to source this data. Mr. Griffiths noted that some sites had better methods of data analysis and use different methodologies, so it should be noted that raw data would help provide some consistency in this respect. Mr. Griffiths noted that some members who had expressed interest in participating had since reviewed their data and withdrawn from the project.

Mr. Griffiths raised the possibility of arranging a meeting at the Dialogue Resource Centre in the coming months to provide a detailed progress update and seek feedback from participants on the process to date, including how to improve the fieldwork component. Members supported this meeting as a good opportunity to get industry and researchers together and exchange information about the data received and how DPI intends to use it. Mr. Milton noted the Dialogue would be happy to host this meeting at the Resource Centre. Mr. Fenwick queried whether it would be sensible to meet after a rain event, however Mr. Griffiths noting this may be explored as an additional meeting further down the line.

ACTION:

 Dialogue secretariat to liaise with Mr. Griffiths and Mr. Baxter (and other industry monitors) to organise a meeting for the ACARP Grazing Land Rehabilitation Study.

6. HRSTS Study

Mr. Milton provided an overview of the HRSTS Study and noted that the first phase of the study had been completed and the Dialogue was working with the Steering Committee to discuss how to progress with Phase 2, which will address the nitrates issue as identified. Members discussed the 'harvestable rights' issue that had recently received press in the Upper Hunter, regarding claims about industry water use. Mr. Milton advised that the mines are required to report their usage on an annual basis. Mr. Fenwick encouraged the Dialogue to demonstrate how water management is improving in future projects.

7. Water Accounting Framework 2017

Mr. Milton provided an overview of the 2017 Water Accounting Framework project results, noting the

comparison of this year's results to the previous reporting period. Members discussed the allocations from Glenbawn Dam, noting this still sits at 100%, indicating each title holder still has rights. Mr. Bray advised that the 2006 January to June period saw water storage depleted by 25% and was concerned that there may not be a significant rain event until next year to ensure supply. Mr. Fenwick advised that he would be attending a meeting later in the afternoon to discuss unregulated stream policies.

8. Update on current water projects

Mr. Milton provided an overview of other water projects the Dialogue is involved with. Of note is the Water Reform Action Plan. Mr. Fenwick advised that two irrigators had recently been taken to court because they haven't had an accurate functioning meter on their pumps. Mr. Bray noted that mines would be compliant with the threshold, although it is very complex.

9. Dialogue realignment update

Mr. Mackie provided an update on the comms activities, especially Hunter Coal Festival and Tocal days, which provided good engagement opportunities for the Dialogue. Members noted that the school mine tours were progressing well.

Mr. Fenwick suggested greater utilisation of the Dialogue website to seek feedback and comments on issues as they arise, rather than waiting every few months for meetings. Mr. Fenwick also suggested a rolling register on what the Joint Working Groups had accomplished in their years of operation. Mr. Milton advised that the Dialogue's accomplishments are outlined in various summary documents, including the November 2018 newsletter, and that the Dialogue can work to better communicate the actions and commitments that have been delivered on a more regular basis.

10. Working Group - Terms of Reference and Membership

Mr. Milton provided an overview of the revised Terms of Reference and Working Group membership, noting that objectives have been transferred from the existing Water, Emissions and Land Management groups. Mr. Hodkinson advised that Emissions & Health has focused more on air quality rather than the 'health' side, and that health concerns are much broader and could encompass heritage issues. Mr. Hodkinson advised the working group on research he has developed summarising local culture and heritage in the Upper Hunter. Mr. Fenwick encouraged Mr. Hodkinson to contact John Flannery as he has ties to council in this area, with Mr. Hodkinson advising that he has raised this matter with the local council. The research was provided to the Dialogue Secretariat.

With regards to the Terms of Reference, Mr. Baxter raised the issue of a consistent approach to how industry deals with high-risk days. The ToR refers to going beyond compliance and operational excellence, however, does not acknowledge that many of the current compliance requirements were once considered 'beyond compliance'. Mr. Fenwick recommended that industry continue to set the bar high, so that industry can already say that they have met the criteria should the regulator. Mr. White suggested that the objective should be refined to 'efficiently and competently minimise dust emissions from sites'. The same principles could be applied to those regarding land management, in that industry should be seeking to perform consistently high. See below for updated Emissions & health objectives in the Terms of Reference:

Air Quality Emissions & Health

The key goals regarding air quality include:

- Develop a better understanding in the industry and the community of mining related emissions, and
- Manage mining operations to achieve consistent, continuous improvement of mining related emissions levels that reflects best practice and meets operational excellence.

ACTION:

- Dialogue secretariat to redraft Terms of Reference objectives to reflect 'best practice'.
- Dialogue secretariat to consider Mr. Hodkinson's heritage research.

11. 2018 Forum Planning

Mr. Milton provided an overview of the 2018 Annual Forum and agenda. Members noted the refreshed approach for the 2018 event. Mr. White encouraged Maitland Business Chamber to be involved given many suppliers may be sourced from this area.

12. Synoptic Plan Review

Mr. Milton noted the recent developments regarding the Synoptic Plan review and encouraged members to share their thoughts on the recent workshop. Members discussed the intention to tie in with, and support the existing documents, and whether the Upper Hunter really needed to have another document. Mr. Bray recommended better coordination by DPC of all the workshops that government has been undertaking, as while they have ticked the box for consultation, the community is wondering what the outcomes are and whether anything significant has been achieved. Mr. Milton noted that the DPC and DPE would be attending the Forum to provide updates to attendees on the Synoptic Plan.

13. Communications Update

Mr. Mackie provided an update on the Dialogue's communications activities, noting that the school mine tours had recently recommenced. Mr. Mackie noted the Dialogue's attendance at various community events across the Upper Hunter, and that the surveys undertaken at these shows has shown a noticeable shift from rehabilitation being the primary issue to air quality and emissions, and the perception that this is due to mining. Mr. Mackie also noted that there was increasing aggression regarding the issue. Mr. Mackie noted that in his conversations, younger people were more positive than older community members on this issue. While some attendees are keen to discuss specific operations, the Upper Hunter as a whole is discussed instead.

Members discussed the community sentiment, noting that they are equipped with greater amounts of information now than in the past. Members also noted that it would be good to get an understanding of whether these community members feel this is an issue across the region, or if it is directly about dust. Members encouraged a response from regulators as to what they are doing, so this can be communicated to the community and whether a negative media spin was influencing perceptions.

Members discussed how the air quality issue could best be managed, and if it was possible. Members noted the air quality information sessions the Dialogue held in the Upper Hunter shortly after it was established, which had a good turn out, and whether this may need to be revisited. Members encouraged the participation of NSW Health in the Working Group given that health is a major concern relating to air quality. Dr Howe from NSW Health was noted by members as being involved earlier in the Dialogue's work and to seek whether there is still interest in participating. Members agreed that if the community doesn't keep government to account there is a tendency to drift off, so it is important that the government is engaged with community in receiving feedback.

Mr. Hodkinson presented dust research to the Working Group, noting a recent IPC decision on a local mine. The Chair advised that given this research related to a specific operation and not the Dialogue in general, the Dialogue would take the research on notice to discuss with the mine directly.

ACTION:

 Dialogue secretariat to seek engagement with NSW Health representative on the Working Group.

14. Dust Risk Forecasting Scheme

Mr. Milton provided a brief overview of the Upper Hunter Dust Risk Forecasting Scheme, noting that this has followed several presentations to the Dialogue's Emissions and Health Joint Working Group.

15. Upper Hunter Air Quality Fact Sheets

Mr. Milton provided an overview of the recently completed fact sheets on air quality, noting these had arisen from a suggestion from Singleton Council regarding negative questions from the community about Upper Hunter air quality.

ACTIONS:

 Dialogue secretariat to provide links to fact sheets to JWG members, particularly council members who may receive these requests for local air quality information.

16. Upper Hunter Air Quality Monitoring Network Seasonal Update

Mr. Milton provided a brief overview of the Autumn 2018 period, encouraging members to review the update provided. The Winter 2018 report would likely be released in October/November 2018.

17. Current Emissions & Health Projects

Mr. Milton noted the Clearing the Air video and encouraged members to view this who are yet to do so, and to share amongst their networks if possible.

18. Presentation: Cate Fisher, Mine Rehabilitation by Industrial Symbiosis

Ms. Fisher provided an overview of the proposal submitted to the Dialogue for consideration. Members asked several questions regarding the proposal, including:

- Members queried whether the symbiosis proposal be used to grow crops, to which Ms. Fisher advised they would be.
- Members queried the significance of Melbourne in the presentation. Ms. Fisher advised that one
 of the critical components of the proposal is that it must be close to a city (within 3 hours). The
 Hunter Valley sites would be good as they would include Newcastle and Sydney waste.
- The Hazelwood Mine was used in research; however, this void involves brown coal, and carries water. The mine is low and flat compared to the Hunter Valley sites.
- Members queried whether any issues with sedimentary material such as salt would impact a
 project. Ms. Fisher advised that with constructed wetlands, it is possible to bring back the water
 to agricultural level water, however it would not be drinkable.
- Members queried how the proposed crops (bamboo, goji berries) were identified, and whether
 there was enough demand for these in the local market to justify their inclusion. Ms. Fisher
 advised that there is increasing demand, although any site opting to go down this path would
 have to undertake their own research.
- Members queried the use of compost material in this and whether it would be subsidised compost costs, which Ms. Fisher confirmed.
- Members queried the terraces being made of recycled products, and whether these would be locally sourced, which Ms. Fisher confirmed.
- Members queried whether wet or dry voids would be needed. Ms. Fisher advised that both may be acceptable, but is looking for mostly dry voids, with areas set aside.
- Members queried whether the international examples of post-void use e.g. Eden Project generates tourism. Ms. Fisher advised that it has generated some tourism but is not significant.

The Working Group then discussed the proposal following Ms. Fisher's presentation. Key feedback received from the Working Group included:

- This proposal is a low-value use for a void and mine waste, and there was concern over the economic benefit for the community and industry.
- Concern from some members that this is a low value use for waste, and whether this is an
 interim solution for industry to do in the meantime until systems catch up. Ms. Fisher advised
 that carbon sequestration needs to be sponsored.
- Concern that there is a push within the community to recycle, and the action of putting waste into the ground runs counter to the recycling trend.
- Members also advised that site approvals would simply not allow for this to happen.
- There are other ways to build terraces in voids, which would be cheaper than this.
- Potential problems with finding a dry void ready to go, or another suitable void that can be terraced in the dry areas, with water in the bottom.
- Not a particularly feasible way of dealing with waste. It needs to be a viable outcome break even isn't desirable, industry waste should be turned into something.

ACTION:

 Dialogue secretariat is to advise Ms. Fisher of potential avenues for the proposal outside of the Dialogue, including the ACARP research program.

19. Next Meeting / Close

Members advised that Wednesdays at 9:00 am would be suitable meeting times for 2019.

The meeting closed at 12:30 pm

Actions arising from meeting UHMD Land Management and Water Joint Working Group Meeting

Action	Responsibility	Status
DPI Water Availability Projects (Previous Meeting)		
Dialogue secretariat to liaise with DPI Water for an update on 'water availability' projects.	Dialogue secretariat	In progress
ACARP grazing study		
Dialogue secretariat to liaise with Mr. Griffiths and Mr. Baxter (and other industry monitors) to help organise a meeting for the ACARP Grazing Land Rehabilitation Study.	Dialogue secretariat	Completed
Terms of Reference and Membership		
Dialogue secretariat to redraft Terms of Reference objectives to reflect 'best practice'.	Dialogue secretariat	Completed
Dialogue secretariat to consider Mr. Hodkinson's heritage research.	Dialogue secretariat	Completed
Communications Update		
Dialogue secretariat to seek engagement with NSW Health representative on the Working Group.	Dialogue secretariat	Completed
Upper Hunter Air Quality Fact Sheets		
Dialogue secretariat to provide links to fact sheets to JWG members, particularly council members who may receive these requests for local air quality information.	Dialogue secretariat	Completed
Project Proposal		
Dialogue secretariat is to advise Ms. Fisher of potential avenues for the proposal outside of the Dialogue, including the ACARP research program.	Dialogue secretariat	Completed

Agenda Item 3

REVIEW OF 2018 FORUM OUTCOMES - PROJECT IDEAS FROM DISCUSSION SESSIONS

Issue

The 2018 UHMD Annual Forum provided an opportunity for Dialogue members to raise issues and discuss potential solutions to address such issues during the targeted discussion sessions. This session has provided the Dialogue with several suggested project ideas to consider in 2019.

Background

Participants at the 2018 UHMD Annual Forum engaged in a targeted discussion session and were able to join a theme of their own choosing. Three Environment themes were discussed (Air Quality, Water issues and Rehabilitation and Final Land Use), with the following goals:

- Improve air quality in the Upper Hunter and community understanding of air quality and its management.
- Progressively rehabilitate land disturbed by mining and identify opportunities to beneficially reuse rehabilitated lands including final voids.
- Preserve water quality in the Upper Hunter and ensure responsible water use by industry.

All responses received during the sessions were collected, with participants advised these would be considered by the Environment Working Groups. Participants were encouraged to specify any physical issues, planning concerns and knowledge gaps, and to then suggest any projects or activities the Dialogue could undertake to address them.

Attached for the Working Group's review are two documents:

- Attachment 3A Detailed Comments from the tables discussing only the environmental issues (Air Quality, Rehabilitation and Water)
- Attachment 3B A summary document of <u>all</u> Project ideas and activities from all discussion sessions (some of which may include environmental aspects)

In assessing the suitability of suggested project ideas, Working Group members are encouraged to keep the following Dialogue objectives in mind, agreed to by Working Groups in mid-2018, which include:

- Engage with interested and relevant stakeholders across all community sectors to ensure that issues of importance can be discussed in an open, balanced and respectful environment;
- Facilitate projects that support any key issues raised by members, and which seek to support, maintain or improve the quality of life for current and future residents; and
- Distribute information on relevant internal and external projects and initiatives to help improve the knowledge and awareness of mining-related matters amongst relevant stakeholders.
- Advocate to government and other agencies for action on matters of importance to the Dialogue and the Upper Hunter.

It is important that the Dialogue continues to be a collaborative effort between industry and the community that addresses the cumulative impacts of mining, by understanding the local community's concerns, and working together to prioritise, develop and implement solutions.

Recommendation:

 That the Joint Environment Working Group review the summary of discussion sessions and project ideas relating to Air Quality, Rehabilitation and Water Issues and advise the Secretariat which project ideas are supported for further consideration.

FOR DISCUSSION/DECISION

Attachment 3A: Detailed Comments from the Environment Discussion Sessions

AIR QUALITY, EMISSIONS AND HEALTH (TABLES 3-4)

Goal: Improve air quality in the Upper Hunter and community understanding of air quality and its management.

Relevant Projects and Resources:

Weather Forecasting Project, Clearing the Air video, UH Air Quality Fact Sheets, Upper Hunter Air Quality Monitoring Network, EPA/OEH Dust Risk Forecasting Scheme

Key Questions:

- 1. What are the key issues related to air quality in the Upper Hunter? This might include physical issues as well as information or knowledge gaps. Please be as specific as you can.
- 2. What projects or activities could the Dialogue undertake to address these issues?

TABLE 3

Issue: Lack of community understanding of air quality criteria, NEPM assessment process.

• The air quality monitors and the mines say it's generally okay, but there are still visible issues with dust.

Solutions:

- Provide basic information on what the air quality numbers mean, including information on criteria that has been developed and how assessment is undertaken.
- How do we communicate air quality/dust? Can people understand it? Need to have these
 presented in plain English and in an accessible way.
- People don't like 24 hour averaging results, as they don't capture localised events as they happen.

Issue: People don't understand the many sources of dust generation.

Solutions:

- Provide clear information on types and sources of dust, including information that dust exists in many areas across NSW, even in those that don't have mining operations.
- How do we communicate it? Use plain English.

Issue: Lack of education about air quality, particularly students, who can be influenced by parents and other community members.

Solutions:

- Integrate more air quality information as part of the School Mine Tours process
- Take students to the Upper Hunter Air Quality Monitoring Network sites and demonstrate how they work and their purpose in regulating air quality.
- Remember that not everyone has the internet, particularly elderly residents across the Hunter.
 May need to consider alternatives to web-based information, such as newspapers, magazines, mailouts, tv/radio as well as newer formats like social media.
- Provide information on what to do when air quality is bad? E.g. stay indoors, close your windows.

TABLE 4

Issue: Capacity for current operations to maintain air quality

Solutions:

• Investigating feasibility of underground operations in the future.

Issue: Air quality forecasts not timely or accurate enough

Solutions:

- Refinement of forecasts for the broader community
- Leads to better planning
- Mine design, alternate dumps

Issue: Review of dust risk sources at sites

Has this changed in the past few years?

Solutions:

- Dust and its impacts on health
- Rostering 12/8 hrs impact on health of mine workers
- Best practice for dust management in the Hunter Valley dust handbook

Other feedback:

Issue: Merriwa Plateau Air Quality and Mining Dust

• Whenever the farming area to the west of Merriwa experience a strong easterly or south easterly wind, which is happening a lot of late, we are experiencing a high incidence of fine dust from the mines arriving over the Merriwa plateau. Dust levels from the mines has been so high that we are sometimes getting a white out effect, literally obscuring our view of the Liverpool Range. It is an extremely fine whitish dust that remains suspended in the air. When we aren't getting the wind and dust from the mines east and southeast of us, we are getting south westerlies bring in in the same sort of dust from the Wollar and Ulan mines. Our air quality is impacted as is our health. Our once pure clean plateau air is now polluted by mine dust on a regular basis. This is different from the 'drought dust' coming in on the wind from the west and north west winds which, when it does arrive, is red and in colour and grainy red soil and quite different.

Solutions:

 Merriwa Air Quality seriously needs to be monitored especially on the plateau west of Merriwa township.

REHABILITATION AND FINAL LAND USE (TABLES 5-6)

Goal: Progressively rehabilitate land disturbed by mining and identify opportunities to beneficially reuse rehabilitated lands including final voids.

Relevant Projects and Resources:

Rehabilitation Principles and Commitments, Beneficial Reuse of Voids Project, ACARP Cattle Grazing on Rehabilitated Mine Land Studies, Synoptic Plan Review, DPE Mine Rehabilitation Visualisation Tool

Key Questions:

- What are the key issues related to mine rehabilitation and final land use in the Upper Hunter? This might include physical issues, planning concerns or information and knowledge gaps. Please be as specific as you can.
- 2. What projects or activities could the Dialogue undertake to address these issues?

TABLE 5

Issue: Need a strategic planning approach to rehab final land use

Solutions:

- Focus on finding best land uses to offset economic impacts of closure avoid site by site planning.
- Incentivises opportunities for alternative land use.
- Change terminology of rehab to reflect things other than environment.

- Win/win approach to rehab. At present, its antagonistic approach: mining vs. agriculture.
- Involvement of Landcare different levels available
- 2-way information flow.

Issue: Lack of detailed records, documenting processes, and monitoring results for rehabilitation

Solutions:

- Industry making sure that information is more available to share across industry, with the regulators and the community to increase transparency.
- Improve the retention of corporate knowledge by keeping better and more detailed records, documenting processes, and recording good longitudinal rehab monitoring results to track progress
- Communication of quality rehab stories to media, outlining process of rehabilitation, via VR headsets

Issue: Buffer lands/voids land not being used to full potential

What is stopping this land being used?

Solutions:

- How can the Dialogue facilitate this between industry and other potential users?
- Transparency, sharing of information between mines with regulators and community.
- Focus on final voids and ignoring general rehab areas
- Develop real life case studies of successful closure pilot sites for m8ne closure
- Better awareness of sites coming up to closure.

TABLE 6

Issue: Synoptic Plan lacks a vision and focus.

Solutions:

- Requires a clear vision, and implementation plan.
- Final land use flexibility
- Education to all stakeholders
- Clear communication to key stakeholders
- Integrate with sub-regional plan
- Run LEM for x years on proposed landform
- Model costs

Issue: Not enough information on final voids and sustainable final land use options

Solutions:

- Greater investigation of sustainable final land use options. E.g. consideration of pumped hydro, energy hub, floating solar, recreational use
- Detailed assessment of water quality
- Develop guiding principles around final land use options increase flexibility
- Need to find a greater balance between native bushland and agriculture.

Issue: Lack of education on EA's/Approvals Process

Solutions:

- Communicate to stakeholders with accessible, clear and usable information to increase awareness.
- Education of EA's / Approvals and their commitments and communication

WATER QUALITY AND STEWARDSHIP (TABLES 7-8)

Goal: Preserve water quality in the Upper Hunter and ensure responsible water use by industry.

Relevant Projects and Resources:

Water Accounting Framework, HRSTS Water Quality Study, Synoptic Plan Review - Water Quality Assessments & Monitoring Guidance Notes, Bioregional Assessments Programme, Common Ground - Water Resources Map

Key Questions:

- What are the key issues related to water management in the Upper Hunter? This might include physical issues, planning concerns or information and knowledge gaps. Please be as specific as you can.
- 2. What projects or activities could the Dialogue undertake to address these issues?

TABLE 7/8

Issue: Poor water quality in tanks

- Concerns with the original study may have been too selective.
- Concerns over capturing an accurate sample group something to revisit.

Solution:

 Look at inter-relation of air quality dust and impact on tanks - could this be used as predictive measure in doing our EIS/EA assessment impacts? Inter-relation between climate patterns

Issue: Lack of information/access to company water data/projects

- Concern over allocation of water resources
- Concerns for public access to and understanding of water quality

Solutions:

- Improve access to water use data and operations' water stewardship projects. Outline what companies are doing in terms of stewardship.
- Education on water usage making data more readily available.
- Outline what is captured, what is discharged, how water is managed onsite, and reused?

Other issues:

- Quality and amount of water in main waterways
 - What is available for the waterway, and how is it allocated
 - What sharing is happening between titleholders
 - O When mines expand?
 - Water quality in tanks?
 - O How do you get it out to the average person?
- Tie up licences
- Where does a small business get access? Name and contact details?
- UoN's HRSTS Study sampling mid-river not capturing data from top/bottom

Attachment 3B: 2018 UHMD Annual Forum - Project/Activity Suggestions from Discussion Sessions

2018 UHMD Annual Forum - Project/Activity Suggestions from Discussion Sessions

ECONOMIC DEVELOPMENT, MINING AND BUSINESS			
Project Idea or Suggested Action	Comment		
 Develop a portal, or interactive website focused on procurement - this will help achieve a two-way understanding between industry and suppliers so that: industry will have greater knowledge of the capabilities of, and have access to a variety of local businesses for various procurement opportunities; suppliers will know what work is being offered, have a specific single point of contact for each company or operation (name and details), and understand the key criteria that needs to be fulfilled to qualify as a supplier/contractor to seek opportunities; and the procurement process can be clearly communicated for all parties, what is to be expected re. responses and time frames etc. 	This is a good idea and could be explored further. It could be as simple or complex depending on what is desired but would need further discussion with Comms Team to determine website capabilities. This will address several comments raised through Forum regarding lack of access points, and lack of knowledge about supplier capabilities. Also provides an opportunity to communicate how the procurement process works to ensure expectations.		
Given the different procedures and requirements across Upper Hunter sites with regards to procurement matters, industry might consider a 'pre-qualification mechanism' for suppliers that is standardised across sites and to share this information through business chambers, local councils and NSWMC/Dialogue.	Great idea in theory but may be difficult to implement in practice. May be worth liaising with each industry partner to determine the information required from suppliers and identify any commonalities as a start.		
Develop a policy to recognise and demonstrate the value and importance of both local suppliers and business needs.	Several sites have local buying programs which recognise this. Ongoing interactions between industry and suppliers may help improve this.		
Host additional networking events, workshops, webinars (or combination of all three) using industry procurement personnel to: • educate suppliers on engagement and advise on how they can access mining industry procurement opportunities; • encourage suppliers to sell their competitive advantages to targeted opportunities; and • build on relationships with business chambers, councils and other key community groups.	These can certainly be held if there is enough demand. The 2018 Forum's success could help point to interest in another procurement-specific function/s for industry and suppliers to continue these conversations and build relationships.		

Developing an industry/supplier working group to advise on capability sharing and tendering process, e.g. webinars	The Joint Economic and Social Development Working Group can address this - May be worth securing the ongoing involvement of a key supplier/s to provide information on their side of doing business.
GAP analysis to develop improvement program to address shortfalls around soft skills - including managing relationship and communicating capability, initiating quarterly/half yearly catch ups with structured conversations and questions. Better understanding of each side of business.	Regular communication and discussions can help, although this ultimately up to each site as to how they do it. Could seek company support for regular check-ins with suppliers.
Investigate increasing flexibility of payment terms and timeframes across Upper Hunter sites, as some are too slow for SMEs. Some have returned to 30 days to help improve cash flow, which has been generally well received.	Several Upper Hunter sites already committing to reduced payment terms. Important for industry partners to acknowledge this concern.
Keep bite-size engagement in mind. Keep it short and sharp. Don't need to tell everything at once. Whole day events are a big imposition on small business' time.	Dialogue needs to think outside the box. We could look to host small-scale seminars/workshops etc. if there is enough demand, working in conjunction with chambers and councils.
Coal Miners Insurance - Increased provision sources, to ensure there is not a monopoly. Third party authority.	Unsure of how UHMD can really assist here. More of an issue for NSWMC to take up if this is a significant industry problem.

STAKEHOLDER ENGAGEMENT AND COMMUNICATIONS			
Project Idea or Suggested Action	Comment		
Reinforce relationships with schools and providing hands-on experiences. Students come to mines, why not mine personnel attending classroom lessons?	Would need to flag with individual sites if this would be suitable but could well be feasible.		
Focus on Year 11/12 Geography students - they need to choose industry cluster to study - it could be an opportunity for better engagement with some well-informed students looking for careers in the near future.	Could be worth exploring.		
Attend local career expos. Consider engagement with university students.	Unsure of local expos in the Upper Hunter. May not be worth it in terms of cost/benefit.		
Utilise VR materials where possible.	Already being done through classroom learnings, overseen by School Tours Working Group.		

Inform new teachers about the mining industry to improve their knowledge. (e.g. New Teacher Program to voluntarily take teachers through School Tours content - could be managed by a teacher).	May be a task for a reconvened School Tours Working Group to consider
Align better with school's subjects and curriculum - if we can tailor work to these subjects and provide content that works for the teachers, this would help.	May be a task for a reconvened School Tours Working Group to consider.
Provide crib room materials (newsletters, general and site-specific Dialogue posters) to mine workers to improve their understanding to champion the Dialogue.	Already being done, managed through the Comms Working Group.
Create a narrative to tell the story of mining's role in this region.	Could integrate into Comms goals for 2018. Messaging would need to remain neutral.
Establish pathways for business to connect with mining, provide info to chambers.	Working through the Joint Economic and Social Development Working Group.
Seek presentations at community and NFP group meetings to boost engagement.	CCC meetings already underway, with final CCC meetings requested and awaiting response. Community group updates to be scheduled shortly.

AIR QUALITY, EMISSIONS AND HEALTH		
Project Idea or Suggested Action	Comment	
Provide basic air quality information on what numbers the criteria involved in air quality assessments mean, and what to do when air quality is bad? E.g. stay indoors, close your windows.	Could be an easy comms piece pulled together using existing resources.	
Review of dust risk sources at sites and to examine dust impacts on health. Provide clear information on types and sources of dust, including that dust exists in many areas across NSW, even in those that don't have mining operations.	Quite a large time since Upper Hunter particle characterisation study was undertaken. Given poor air quality in 2018, may be worth looking at.	
Integrate more air quality information as part of the School Mine Tours process.	More detailed information could be included in the Tour Guide Notes, however, may not provide much additional benefit to the school audience.	
Incorporate the Upper Hunter Air Quality Monitoring Network sites and demonstrate how they work and their purpose in regulating air quality.	The monitoring sites are not overly exciting. Not sure what value this would add. The network sites should be referenced of course. Check notes.	

Refinement of forecasts for the broader community.	Could be worth looking at refining broadcasts.
Best practice for dust management in the Hunter Valley - dust handbook.	Review the last dust management booklet.
Investigate link between Merriwa Plateau Air Quality and Mining Dust.	Specific comment from the Secretary Merriwa Branch NSW Farmers, provided outside of the Forum. Range of issues raised. May require a further look.

REHABILITATION AND FINAL LAND USE		
Project Idea or Suggested Action	Comment	
Greater investigation of sustainable final land use options. E.g. consideration of pumped hydro, energy hub, floating solar, recreational use (FACEBOOK Posts, based on Final Voids Study). Focus on finding best land uses to offset economic impacts of closure - avoid site by site planning.	Beneficial Reuse of Voids has commenced this work. Perhaps there is space for additional work.	
Ensure detailed industry rehabilitation information is available to share across industry, and with the regulators and the community to increase transparency.	Already being done via the UHMD Rehab project, annual statements are published on the website - may need to restructure how this appears this so it is more apparent to community.	
Communication of quality rehabilitation case studies/stories to media and community, outlining processes involved in rehabilitation, use via VR headsets to tell story.	Rehab case studies have been developed through Mine Rehab Booklet. Will promote case studies relevant to UHMD. Could be worth seeking similar case studies from other Dialogue industry partners if not already captured.	
Facilitate use of buffer land/voids to their potential, share information between mines with regulators and community.	Would be worth looking at. This issue is regularly raised.	
Develop real life case studies of successful closure pilot sites for mine closure. Better awareness of sites coming up to closure.	Working Groups are looking to build up contemporary case studies.	
Detailed assessment of void water quality	One assessment already completed through the Beneficial Reuse of Voids project. May be worth revisiting as first report was not overly definitive.	
Develop guiding principles around final land use options to increase flexibility. Need to find a greater balance between native bushland and agriculture.	May be worth JASC reviewing as they cover Synoptic Plan matters	

Communicate EA's/Approvals Process to stakeholders with accessible, clear and usable information to increase awareness.

Could be worth exploring. This is a confusing process for the community.

WATER QUALITY AND STEWARDSHIP		
Project Idea or Suggested Action	Comment	
Look at inter-relation of air quality dust, impact on water tanks and climate patterns - could this be used as predictive measure in doing EIS/EA assessment impacts?	Given the focus on air quality and feedback received from community at CCCs regarding quality of tank water, this may be worth exploring further.	
Improve access to the water use data and stewardship of local operations. Outline what companies are doing in terms of stewardship.	Water Use data located in all company annual reviews/AEMRs. Could be worth sites completing a brief standardised water report (similar to Rehab Principles) and published on website. Would need to reference site-specific results, rather than the Dialogue's usual approach through region-wide aggregate reporting.	
Education on water usage - Outline what water is captured, what is discharged, how water is managed and reused onsite?	May be worth exploring. Dialogue secretariat has some existing information, and this could be an opportunity to repackage in a general format for community. Follows on from previous Working Group recommendation to have a Water Accounting Fact Sheet.	

Agenda Item 4

REVIEW OF 2018 FORUM OUTCOMES - FEEDBACK FROM PARTICIPANT SURVEY

Issue

Each year, Forum participants are invited to provide feedback via a survey following the event. This feedback is used to help planning in the year ahead.

Background

Participants were asked 17 questions to assess the satisfaction with this year's Forum and seek feedback on what improvements could be made for future events. For the key results, please see below.

Key Results:

- Respondents gave the Forum an overall rating of 3.9 (up from 3.6 in 2017), with 70% of respondents rating it 4 or above.
- Respondents gave the Registration process a score of 4.4 (up from 4.2 in 2017), with 87% of respondents rating it 4 or above.
- Respondents rated this year's Forum more favourably compared to last year, with 43% of attendees indicating it was better than the previous year. With 53% of respondents being first time attendees, and just 3% rating this on par with previous Forums, this meant that no respondents indicated it was worse than the previous year.
- Respondents rated the venue's quality of food and conference facilities highly, with both receiving an average score of 4.3 (up from 3.5 and 3.3 in 2017 respectively).
- Respondents rated the opportunity to network with colleagues and other stakeholders an average of 4.3 (up from 4.0 in 2017), with 83% of respondents rating a 4 or above.
- 97% of respondents agreed the change in format to a morning networking and information session a positive move for the Forum.
- 87% of respondents felt they had enough opportunities to raise or discuss the issues of most importance to them. Some respondents however felt that not enough was being resolved in terms of environmental issues (air quality and water usage) through the discussion sessions, however understood the 2018 Forum was procurement focused.
- 71% of respondents advised they are planning to attend the Forum in 2019, with 29% possibly attending. No respondents advised they would not attend.
- Respondents suggested future Forums involve students, local vendors, community and environmental not-for-profit groups, rail companies, air quality advisory committee members.
- Respondents suggested greater social media sharing, pre-event emails, radio talkback debates, leveraging stakeholder networks, attending other community meetings and events, personalised invites, and preparing promotional materials to generate greater interest in 2019.
- For future Forum topics, respondents suggested focusing on local buying schemes, economic diversification, indigenous consultation, and environmental impacts, as well as providing a comprehensive review of outcomes achieved during the year.
- Members also expressed they would like to see how mining complaints are addressed from start to end, and an explanation of how rehabilitation planning is undertaken at sites.

For detailed survey results and comments from respondents, please see Attachment 4A.

Recommendation:

 That Working Group members review the survey feedback and discuss any comments which should be considered further by the Dialogue in planning the 2019 Forum.

FOR INFORMATION/ DISCUSSION

Attachment 4: Full 2018 Annual Forum Participant Survey Results and Comments

Upper Hunter Mining Dialogue 2018 Annual Forum Participant Survey Results

30 respondents from 150 Forum participants (20% response rate, 93% completion rate)

Question 1: How did you hear about the Forum?		
Response	Count	%
NSW Minerals Council email	12	40.0%
Colleague	11	36.7%
Other (please specify)	7	23.3%
Total	30	100.0%

Comments:

- I was invited by the Singleton mining dialogue office after I discussed some concerns.
- Business chamber
- Member of Upper Hunter Mining Dialogue
- Muswellbrook Business Chamber
- Muswellbrook Chamber of Commerce
- NSW EPA forwarded the email to NSW Office of Environment and Heritage
- UHMD Working Group

Question 2: How would you rate the registration process? (on a scale of 1-5, where 1 is	
unsatisfactory. 5 is excellent)	

Response	Count	%
1	1	3.3%
2	1	3.3%
3	2	6.7%
4	8	26.7%
5	18	60.0%
Total	30	100.0%
Average Score	4.37	2017: 4.21 (+0.16)

Comments:

- Apparently, I was registered but that information had not been processed at the registration desk
- Starting time could have been put back to enable preview of exhibits
- very friendly service and prompt

Question 3: How would you rate the Forum overall? (on a scale of 1-5, where 1 is	;
unsatisfactory, 5 is excellent)	

Response	Count	%
1	1	3.3%
2	0	0.0%
3	8	26.7%
4	14	46.7%
5	7	23.3%
Total	30	100.0%
Average Score	3.87	2017: 3.6 (+0.3)

Comments:

- I personally skipped out on the key process has got talking to stallholders and feel that would have been fantastic to be part of the collaborative dialogue
- I was unsure where I fitted into the concept of the day coming from a not for profit
 organisation not associated with the mining industry but it allowed me to network with the
 mining industry to hopefully establish a viable relationship with the mining industry to
 hopefully provide our participants with employment opportunities and assist the mining
 industry to become culturally appropriate workplaces for Aboriginal and Torres Strait
 Islander peoples.
- Informative, great venue, great food, well organised, friendly atmosphere
- Mining still do not understand working with Native title claimants
- While I thoroughly enjoyed the round table sessions, I would have also enjoyed presentation/s on the industry and detailed UHMD project updates etc.

Question 4: What was the highlight of the 2018 Forum for you? (Open Response)

- Witnessing stakeholders in the same space
- Having the chance to meet a range of stakeholders and face to face networking.
- A few discussions with some participants
- As a mining operation, the interaction with members of the public. Also, the venue was excellent.
- Great face to face conversations with key mining staff
- Great networking opportunities and interesting round table workshops/presentations.
- Having an opportunity to speak directly to the Newcastle EPA, expressing my views that could have had tangle results.
- Having colleagues from the Procurement / Supply function attend it brought the UHMD work to a different part of the business.
- Having mine site Procurement staff available.
- Networking with industry
- Opportunity to have both regulators and miners in the one place showcasing what they are currently doing in the Upper Hunter, as well as having mining company procurement

- personnel in attendance.
- Plenty of time for networking
- Presentations and formal sessions including working table groups
- Supplier networking. Productive, F2F conversations with suppliers about issues and opportunities
- Table sessions
- The brainstorming sessions upstairs
- The interaction I had with the various mine site when they had their tables set up
- The meet and greet
- The opportunity to network across the stalls
- The procurement stalls and being able to talk to a variety of people and promote ourselves.
- The round table engagement on the issues faced with supplier engagement
- Time to interact with people and opportunity for one on one discussion
- Workshop session

Question 5: How would you rate this year's Forum compared to last year?		
Response	Count	%
Worse than previous year	0	0.0%
Better than previous year	13	43.3%
First time attending	16	53.3%
On par with previous year	1	3.3%
Total	30	100.0%

Comments:

- Youth from local schools could enhance the process
- Haven't attended for a number of years but I understand it was better than the previous year
- I didn't attend last year but did attend in years prior. This year's format allowed for a much better flow of conversation as opposed to longer presentations from different people.
- Most speakers did not provide adequate information to rate time taken
- Very valuable and looking forward to attending future events.

Question 6: How would you rate the conference facilities and food at the Forum venue, Muswellbrook Race Club? (on a scale of 1-5, where 1 is unsatisfactory, 5 is excellent)

Response	2018 Avg Score:	2017 Score:
Quality of Food	4.25	3.5 (+0.8)
Conference Facilities	4.3	3.26 (+1.0)

Comments:

- "Lunch" needed to be better organised
- Couldn't stay for lunch
- It was a long way to travel for non-Muswellbrook people.
- Need to ask if anyone has any food requirements
- Well chosen

• You wouldn't want it to be any warmer for an outdoor setup!

Question 7: How would you rate the Forum as an opportunity to network with colleagues and other stakeholders? (on a scale of 1-5, where 1 is unsatisfactory, 5 is excellent)

Response	Count	%
1	1	3.3%
2	0	0.0%
3	4	13.3%
4	10	33.3%
5	15	50.0%
Total	30	100.0%
Average Score	4.27	2017: 4.0 (+0.27)

Comments:

- It would have been good to have everyone from the morning stalls stay for the table discussion.
- Plenty of time given to allow networking. Venue set up for the Forum was excellent.
- There were stakeholders that did not bother to attend.

Question 8: Was the change in format to a morning networking and information session a positive move for the Forum?

Response	Count	%
Yes	29	96.7%
No	1	3.3%
Total	30	100.0%

Comments:

- Good for travellers
- It's the age-old problem too many industry reps, too few community. Not sure how to fix this though other than by having an outraged community!
- Possibly networking morning and after concluding activity separated by realistic speakers then lunch.
- To consider is how to get more local business and community engagement. A Lot of people were at work or could not commit to the full day
- Unsure, haven't attended before

Question 9: Do you have any suggestions on how we could improve networking opportunities? (Open Responses)

- Agenda/process sent beforehand so aware of when opportunities to connect arise
- Did the message of the agenda reach its full potential to the external community?
- Great engagement with community organisations and not for profits limited opportunity to meet people outside of the business world
- I believe much more could be achieved in the way of networking by the mines
- Having more interactive websites, letting people know what skills or services that they are
 having difficulty fulfilling. At the same having a descriptive web link letting people
 understand key criteria that they have to have in place to be a mine supplier/contractor.
- I think given the time frame you did an awesome job. We can't commit to a full day, so the
 networking opportunities provided were perfect. The venue for lunch also allowed more
 networking opportunities.
- I wonder if it would be worth having the various companies host a stall throughout the day so that people would know where to go to discuss something with them.
- Invite more staff from mining companies next year
- Maybe a more suitable venue to allow discussion across the "room" rather than a line of displays-felt like a lot of people didn't make it up to the end of the displays in the time allocated
- Mixture is just right
- More mining companies to be involved
- Not sure have it in a more public area? I've seen 'speed networking' (like speed dating for businesses) work well in the past but you'd need the right people there.

Question 10: Did you have enough opportunities to raise or discuss the issues of most importance to you?

Response	Count	%
Yes	26	86.7%
No	4	13.3%
Total	30	100.0%

Comments:

- I didn't see much resolved regarding air quality and waste of water. Other alternative mining methods to Open Cut were not received well.
- Probably need an opportunity to raise more environmental issues through the round tables.
 It is understandable because the focus was on procurement so difficult to get the right mix of issues to be discussed.
- Realistic evaluations of the true ongoing grazing potential of rehabilitation as well as the
 true water impacts to aquifers and stream being honestly discussed. To hear that there
 was testing of quality of water in tanks was news to me as I had heard nothing about this
 during the year.

Question 11: Were there any other stakeholders (individuals or organisations) you think should have been included in the 2018 Forum? (Open Responses)

- Schools and youth
- A bigger attendance from the smaller local vendors would have been good
- Community Organisations and Not for Profits, Schools
- Didn't have the students and need to get more local government and environmental groups to create a greater discussion of the big picture.

- Great to see local businesses at the Forum. Need to engage more community.
- I think the Community could have been better represented. The focus seemed more on mine networking, rather than solving real issues, with potential tangible results.
- People allied or engaged in the impacts on water both locally and cumulatively
- Rail companies that transport coal
- School groups/ teachers. we need to broaden the audience. Thought the facilitator was really good.
- Upper Hunter Air Quality Advisory Committee members

Question 12: How can we improve our engagement with community stakeholders to encourage greater participation in Dialogue activities? (Suggest any community engagement initiatives, channels or methods that might be better utilised by the Dialogue). (Open Responses)

- Social media Facebook events listing and advertising, hunter councils and invite other councils, Newcastle business networking groups, hunter wetlands centre, permaculture, Landcare, sporting clubs, National Parks and Wildlife Service, Tom Farrell Institute, any outdoors organisation, *hunter health, local churches etc.
- Attending community events (NAIDOC), I think the radio coverage was beneficial for community to engage with the dialogue. If other avenues arise, I would inform the Dialogue of this.
- Being more present in the community, office location. Consider a name change for the general community, I am not sure the average person understands what the "Dialogue" would do or how they could be involved.
- By being totally truthful rather than attempting to continually sell the industry and the false claims regarding the outcomes of rehabilitation and the "new' belief of the beneficial uses for voids to validate leaving them behind.
- Encourage mining operations to share the activities through CCC and newsletters.

 Continue engagement with schools. Seek sponsorship from mining companies to co-brand a promotional item or engagement initiative. Not a water bottle, something that everyone uses, wants and will talk about that relates to the Dialogue.
- Funding community initiatives
- Go to community inter agency forums and present on behalf of the dialogue to get more engagement.
- Keep up the good work. presence at community events, as already happens, is excellent
- Less talk about 'the dialogue' more talk about things that are relevant to people. Seek out the more difficult conversations. Easy to say though isn't it.
- Maybe engage in discussions with Rotary, Lions Club, sporting / charity groups. Similar to this year's procurement drive maybe next year could be about accessing sponsorship etc?
- Maybe individually invite community organisations to send a rep, Men's Shed CWA Rotary etc
- Maybe later in day so small business owners can attend
- more advertising
- OU with registered Native title claimants
- Perhaps some form of regular talk back, debates or discussions on radio, without either party being aggressive or insulting, to get their views aired.

Question 13: Please list any topics you would like to see addressed at future forums. (Open Responses)

- Already listed and respectful dialogue from the transition from a coal economy crucial to good engagement
- Community projects, buy local schemes
- Economic Diversification
- Engagement with the general community.

- How can the industry get away from false prophets, the water consultants and provide a space to work towards overcoming the losses created by the industry?
- I feel this year's forum was focused on too much of how to get a piece of the Money PIE. If the dialogue is truly there for the community then the real issues need to be tackled. For me personally these fall into areas of,1) The type of mining practice, open cut vs underground mining impacts. Looking at the environment, public health, air quality, loss of substantial water from springs and associated water courses, rivers and streams. The other big factor for me is how twelve-hour rosters affect workers and the community, introduced by the mines, to reduce employment. Any form of occupational health and safety measures are simply band aid approaches, if these unsustainable rosters are continued.
- I liked the focus on local procurement and think this is a theme that the forum should continue to promote in future years - as this is a great driver to bring local community and mining organisations closer together.
- Impact on local agriculture
- Indigenous Employment. Indigenous Community consultation. Community Focused topic
- Industry updates and UHMD project updates.
- More talk about the positive side of mining job opportunities. Tips from HR on resume writing, interviews. How to position yourself to get into the industry.
- Native title

Question 14: What improvements can we make for the 2019 Forum? Or anything you'd like to see more or less of? (Open Responses)

- Suggest priming via pre-event email regarding stories for change, collaboration success etc so folk willing to dive in deeper to exploring possibilities beyond current roles
- A roving microphone, keep people informed that there are two separate areas and "the Upper Hunter Mining Dialogue stand has "interactive...." Keep the audience engaged. The Passport concept was lost on some people I spoke to.
- Change of venue while the race club is a great venue. Spreading everyone across the grounds made it a bit disjointed.
- Genuinely working towards repairing the damages created by the industry, land and water, rather than covering these issues behind dodgy trials that are designed to provide a specific outcome.
- Greater promotion of participation by procurement personnel from local mining organisations, as well as local small supplier attendance. I attended representing BHP's local buy program, and whilst we met with a few local suppliers, this would have been a fantastic opportunity for many more local suppliers to meet with me and the team and promote opportunity for upcoming supply to BHPs site. It is generally very hard for local small suppliers to get the right purchasing contacts in mining organisations, and therefore this was a missed opportunity for many local Hunter suppliers and contractors.
- I think the forum could be better served by looking back at the outcomes achieved during the year from more proactive engagement from both sides of the fence, so that real tangible results can be realised. Key speakers in these areas could give a short summary. Perhaps even a debate about some of these key issues.
- Insight for community members on who their complaints are addressed i.e. the call is made to the hotline, the call then goes to X, and is responded to by X to give the community transparency of the process. Insight into rehabilitation planning what companies have to work through so people can see the process.
- Public talks from all aspects of the community not just NSW minerals council.

Question 15: Are you planning to attend the 2019 Annual Forum?

Response	Count	%
Yes	20	71.4%
Possibly	8	28.6%
Total	28	100.0%

Question 16: Who were you representing at this year's Forum?		
Response	Count	%
Mining Industry	12	42.9%
Local Government / Council	1	3.6%
Individual or Community Group	4	14.3%
Government Department	2	7.1%
Business community	7	25.0%
Other	2	7.1%
Total	28	100.0%

Comments:

- Concerned Citizen whose family has been severely impacted by the mines, because of
 continued irresponsible and in some cases illegal planning practices resulting in mine
 expansion the Hunter Valley community cannot afford.
- Registered Native title claimant group

Question 17: What is your Primary Location?		
Response	Count	%
Other Upper Hunter	1	3.6%
Sydney	2	7.1%
Muswellbrook	8	28.6%
Newcastle / Lower Hunter	8	28.6%

Singleton	9	32.1%
Total	28	100.0%

Comments:

- Muswellbrook, Singleton, Maitland, upper hunter LGA's Newcastle office cover all of Hunter localities
- Brisbane (2)

Agenda Item 5

SYNOPTIC PLAN UPDATE

Issue

The Synoptic Plan Review continues to progress.

Background

Representatives from the DPC attended and participated in discussions with the community at the 2018 Upper Hunter Mining Dialogue Forum, providing a chance to showcase their 3D post mining visualisation work.

Work is continuing on Synoptic Plan including the development of a road map which ties the various components of the review together. It is understood that this work will be released publicly following the state election in March 2019.

FOR INFORMATION

Agenda Item 6

EMISSIONS AND HEALTH UPDATE

Upper Hunter Dust Risk Forecasting Scheme

Since 1 September 2018, the NSW EPA has been notifying the industry and the community of potentially high-risk dust days as well as using the system to guide the EPA's inspection program, with the intent of increasing general awareness of high-risk days and ensure industry compliance with regulatory requirements. For mining operations, the EPA has implemented a system whereby nominated contacts at each mine will be directly notified via email and sent a forecast at 3pm the day prior to a high-risk day. Community notification of high-risk days will be via Twitter.

Mitchell Bennett from the EPA will be attending the Joint Environment Working Group to provide a verbal update on current government air quality initiatives.

Upper Hunter Air Quality Monitoring Network Update

The Winter 2018 Seasonal Report was published in late November. Overall, the Upper Hunter air quality for 1 June to 31 August 2018 was generally good to fair. Muswellbrook and Singleton recorded very good to fair air quality indices within national benchmarks 93% and 97% of the time, respectively. Conditions in the region continued to be dry and warm, resulting in elevated particle levels from local sources combined with long-range dust transport, during widespread dust storms. Levels of nitrogen dioxide (NO2) and sulfur dioxide (SO2) were below benchmark concentrations. Two instances in late June where daily average levels of PM2.5 were above the 25 μ g/m3 were likely due to wood smoke with cold calm conditions overnight. Daily average levels of PM10 were above the 50 μ g/m3 benchmark on 29 days, 19 more days above the benchmark compared to winter 2017. Most of NSW continued to be drought-affected, with widespread dust storms in July and August.

For the full Winter 2018 seasonal update, please click the link below. A Spring 2018 report is likely due at the end of February 2019.

https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Air/air-quality-monitoring-network-upper-hunter-winter-2018-180581.pdf

FOR INFORMATION/DISCUSSION

Agenda Item 7

UPDATE ON LAND MANAGEMENT PROJECTS

Rehabilitation Principles and Commitments

The Rehabilitation Principles and Commitments Results are up to date and published on the Dialogue website. The Dialogue is preparing to seek information for the 2018 calendar year from all industry members towards the end of March 2019 to coincide with sites preparing their annual reviews.

Feedback was sought from Dialogue members regarding an infographic for this project to communicate the results and emerging trends on an annual basis, given the project has now been operational for several years. This was finalised following final Working Group comments in October 2018 and displayed at the 2018 Forum alongside other key Dialogue environmental projects.

The infographic can be accessed and reviewed on the Dialogue website:

http://www.nswmining.com.au/getattachment/Dialogue/Latest-Projects/Land-Management/Rehabilitation-Principles-and-Commitments/Rehab Infographic A4Flyer.pdf

Grazing Trials / ACARP study into rehabilitation projects

Work continues on the follow-on ACARP project, C27030 Examination of Past and Present Mine Rehabilitation to Grazing Land as a Guide to Future Research. The desktop review component is well underway with information provided by most companies (one additional company may still contribute). Field work has been delayed due to ongoing drought conditions. Further field work is currently scheduled for March, but this may have to be reviewed if there is no substantial rain event to allow for pasture growth and development of soil biological activity.

Mine rehabilitation booklet

The Dialogue will seek to publish relevant Upper Hunter rehabilitation case studies collected through the mine rehab booklet project and promote these documents on the Dialogue website and social media in the coming months. Given the recent operational and policy rehabilitation reforms are still under consideration and the reforms have not yet been implemented, nor had the opportunity to bed down, the Dialogue will not seek to publish the full document at this time.

OTHER PROJECTS

NSW Government Improving Mine Rehabilitation Discussion paper

The Department of Planning and Environment is yet to publicly respond to any submissions received on a 2018 Discussion Paper which proposed to integrate rehabilitation requirements into the assessment and operational phases of mining and develop policies for how rehabilitation should be regulated and how final voids should be managed. It appears the policy has been delayed until after the election.

Operational Rehabilitation Compliance and Reporting Reforms

The Resources Regulator continues to consider submissions provided to the Operational Rehabilitation Compliance and Reporting Reforms. At this stage it is unclear when the Reforms will be implemented, and how the Resources Regulator will respond to submissions received.

Senate Committee Inquiry into mine rehabilitation

On 12 February 2019, the Senate granted a further extension of time for the Senate Environment and Communications References Committee to report until 20 March 2019.

FOR INFORMATION / DISCUSSION

Agenda Item 8

UPDATE ON WATER PROJECTS

HRSTS Study

Work progresses on a Dialogue study into the overall water quality of the Hunter River and the functioning of the Hunter River Salinity Trading Scheme.

Following the completion of the initial study into the water quality at Hunter River Salinity Trading Scheme discharge points compared to the overall health of the Hunter River, the Steering Committee met with the EPA and the University of Newcastle to discuss the need for a follow-on study.

It was considered that, given the good performance of the scheme, that further studies may not be necessary. The steering committee thought it important to close out the issues identified in the initial study and are currently considering the need for further studies.

A consultant has been engaged to scope up an option for a follow-on study should it be required.

Water Accounting Framework

The Water Accounting Framework Results are up to date and published on the Dialogue website. The Dialogue is preparing to seek information for the 2018 calendar year from all industry members towards the end of March 2019 to coincide with sites preparing their annual reviews.

The Dialogue is currently developing a Fact Sheet or Frequently Asked Questions (FAQ) document to help improve general understanding of some of the complex aspects of the water accounting framework. The FAQ document will be developed to coincide with the analysis of 2018 results. The Dialogue website has been updated with a general FAQ from the Minerals Council of Australia in the meantime. Members are encouraged to provide input into some potential questions about industry water accounting and stewardship practices that community members or those unfamiliar with the project may have.

Water Reform Action Plan Update - Greater Hunter Regional Water Strategy

The Greater Hunter Regional Water Strategy was released in late 2018. Eddie Harris, Principal Regional Water Strategist with the Department of Industry, has previously presented to the former Joint Working Group for Water and Land Management on the Department's preliminary work in this area.

The Strategy is designed to secure water supply in the Greater Hunter Region over the coming decades (from the Manning River catchment in the north, the Hunter Catchment in the west, and the Central Coast to the south).

The focus of the strategy is new water pipelines in the region to improve the flexibility of regional water management, increase water availability and provide better resilience in the face of drought conditions. These options provided the greatest cost benefit ratios from a range of infrastructure investments assessed.

The Lower Hunter is characterised by relatively high-water security, with rare short periods where water supply needs to be augmented, while the Upper Hunter is characterised by longer periods of drought and lower reliability. Connecting these systems will improve overall system security.

The proposed pipelines include:

- A potable water pipeline between Hunter Water and Singleton Council to provide greater flexibility in potable water supply between the two regions.
- A raw water pipeline connecting Lostock and Glennies Creek dams to take better advantage of Lostock dam's high yield but low storage capacity.
- A recycled water pipeline taking treated effluent from Hunter Water up to Singleton for agricultural and industrial use (note that Hunter Water is progressing its own business case for

this project). Hunter Water currently discharges around 30,000 ML of water a year to the Hunter River and the ocean.

Following the construction of the pipelines, water sharing plan rules would be updated to reflect the greater connectivity with the aim of deepening the water market in the region, with the market currently characterised by relatively large holdings that are traded infrequently.

Dol Water is also considering how to take advantage of the additional water that will become available when Liddell Power Station closes in 2022, however detailed planning cannot take place until AGL confirms its proposals with the site and replacement generation technology.

The business cases for the pipelines and detailed engineering are currently being progressed, and the Hunter will need to compete for infrastructure investment with other regions.

Submissions on the strategy are due on 28 February 2019. More information can be found here: https://www.industry.nsw.gov.au/water/plans-programs/water-mgmt-strategies/greater-hunter-region

FOR INFORMATION / DISCUSSION

REHABILITATION

Industry Principles & Commitments 2017 Results



AN UPPER HUNTER MINING DIALOGUE FACT SHEET

Since 2012, the Upper Hunter Mining Dialogue has been collecting annual rehabilitation data and information from mining operations in the Upper Hunter to provide information to the community regarding the amount of rehabilitation activities being undertaken. This project supports the Dialogue's two primary land management goals:

- **Goal 1** To decrease the time that disturbed areas are left without final or temporary cover, recognising that different mining operations are at different points in rehabilitation.
- **Goal 2** To achieve a consistent level of best practice, quality, integrated rehabilitation both within the industry and with future land uses across the Upper Hunter and to be a responsible steward of the land.

The table below outlines the Dialogue's rehabilitation principles and other information sought from industry through this project.

REHABILITATION PRINCIPLES AND COMMITMENTS

Principle 1 Include	renabilitation	bianning in	mine planning

Principle 2 Undertake progressive rehabilitation

Principle 3 Minimise time that disturbed areas are left without vegetation

Principle 4 Prioritise areas of rehabilitation and temporary cover to reduce impacts

Principle 5 Meet target for rehabilitation progress identified in the Mining Operations Plan
Principle 6 Set quality targets for rehabilitation in the Mining Operations Plan and implement

a monitoring program to measure performance

Rehabilitation	2017 Result
Total land area disturbed and not yet rehabilitated at the beginning of the reporting period	214.1 km²
Total amount of land newly disturbed within the reporting period	13.3 km²
Total amount of land newly rehabilitated within the reporting period	7.6 km²
Total land area disturbed and not yet rehabilitated at the end of the reporting period	220.3 km²
Total area of rehabilitation at all operations at the end of the reporting period	123.7 km²
Annual rehabilitation to disturbance ratio	0.58
Overall proportion of disturbed land rehabilitated	36.0%
Estimate of total land held as biodiversity offsets	417.5 km²
Estimate of the total area of land managed for agricultural use (e.g. grazing, cropping, viticulture)	593.2 km²

Local Government Area (LGA) Sizes		
Muswellbrook	3,405 km²	
Singleton	4,893 km²	
Total	8,298 km²	
Mining Land Use		
Total mining rehabilitation completed	124 km²	
Total disturbed land awaiting rehabilitation	220 km²	
Total disturbance across Upper Hunter LGAs	344 km²	
Other Land Use		
Total agricultural land use	2,432 km²	
Total protected areas (incl. National Parks)	3,106 km²	
Total urban area (Residential, Business and Industrial)	27 km²	

REHABILITATION

Industry Principles & Commitments 2017 Results





2017 Results and Analysis of Trends

Just

4.1%

of the total land in the Muswellbrook and Singleton LGAs is disturbed by mining. The amount of biodiversity offsets has increased almost

4X

since 2012.

The overall proportion of disturbed land rehabilitated continues to grow to

36%

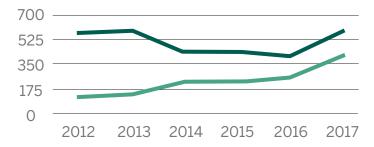
of all land disturbed by mining in 2017.

The total amount of mine rehabilitation has increased by over

40%

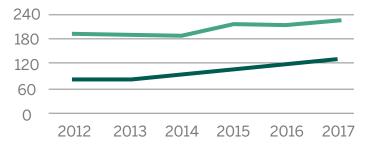
in the Upper Hunter since 2012.

Total biodiversity offsets vs Total managed agricultural land km²



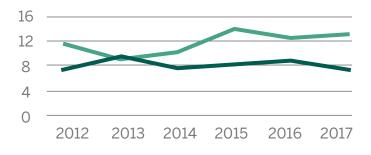
Total land area disturbed and not yet rehabilitated vs.

Total land area rehabilitated km²

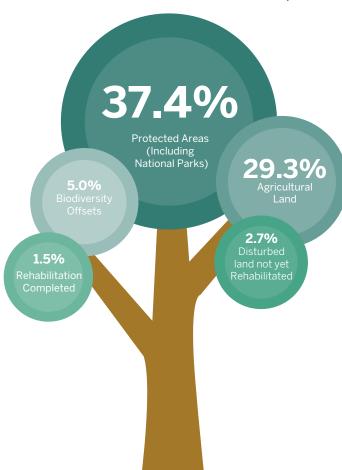


Total land newly disturbed vs.

Total land newly rehabilitated km²



LAND USE IN THE UPPER HUNTER (MUSWELLBROOK AND SINGLETON LGAS)



124km² Total rehabilitation completed
 220km² Total disturbed land not yet rehabilitated
 417km² Total biodiversity offsets
 2,432km² Total agricultural land
 3,106km² Total protected areas (inc. national parks)
 8,298km² Total Muswellbrook & Singleton LGA area

To find out more about the UHMD, visit miningdialogue.com.au

Agenda Item 9

UPDATE ON COMMUNICATIONS ACTIVITIES

Issue

The Dialogue continues to engage in various communications activities in line with the revised Communications Plan. Please see below for an update on the key activities:

Background

Please see below for an update on key activities:

Community and stakeholder engagement

- The School Mine Tours Program continued to roll out well into the final quarter of 2018, with continued great feedback from students, teachers and mines. However, several tours had to be postponed due to adverse weather, issues at mines, or cancellations due to high schools lacking sufficient student participation. The final three months of the program saw nine tours from seven schools across seven mines. With the 2018 program now concluded, about 650 students from 18 schools took part in 17 tours across 12 mine sites, less than the originally estimated 1000 potential students over 28 tours. The program's working group comprising teachers, community members and industry representatives will be reconvened to examine the lessons learned in 2018 and implement them for the 2019 program, as well as discuss the development of in-class teaching material with retired Muswellbrook High School science teacher Elizabeth Moore.
- The Communications Working Group Chair and Dialogue secretariat recently met with Trevor John from the Regional Development Australia (RDA) Hunter branch in January to discuss the School Mine Tours Program and its potential inclusion in a new education strategy. The RDA is working with the NSW Department of Education (Department) to introduce STEM courses into Hunter public schools and is interested in the School Mine Tours Program potentially playing a role by facilitating tours as part of the STEM courses. The Department plans to introduce a STEM program across years 5 to 8 into all public schools with Muswellbrook, Lake Macquarie and Cessnock schools taking up the program in 2019. There are potential benefits of the Dialogue assisting the STEM program with its School Mine Tours Program both through the scheduling of tours and development of in class school teaching materials.
- The Dialogue was on display at the Singleton Show and Broke Village Fair in September and at the annual forum in November. In December, an update on Dialogue activities was presented to the Muswellbrook Chamber of Commerce and the Dialogue was again on display at the Muswellbrook Christmas Spectacular in terms of interactions, the Spectacular was very slow with only six conversations and one survey filled out. This event is aimed at family entertainment and offers little value to the Dialogue as attendees are not interested in visiting displays; recommend it is removed from our community engagement calendar.
- The Dialogue has attended meetings for 10 out of the 16 CCC Meetings across 7 of the 9 Dialogue industry partners in the Upper Hunter throughout 2018 to provide an update on the Dialogue and its projects. The Dialogue will seek presentations at six remaining sites in Q1/2 2019: Liddell, Mangoola, United, MTW, Wambo, and Bengalla. Face to face meetings with additional community interest groups will be sought shortly.

Communication Resources

- Dialogue posters have been updated and infographics for the water accounting, rehabilitation reports and air quality have been produced. Upcoming community events include the Upper Hunter Show in Muswellbrook (March) and Tocal Field Days in (May).
- The Dialogue's second newsletter was published in time for the November 20 annual forum and was distributed electronically across the Dialogue's database as well as printed copies being distributed at community engagement events.
- Since the Dialogue's Facebook page went live in September; it has steadily growing "likes" and engagement and had reached more than 2000 people at the beginning of January 2019.

- The long-awaited Virtual Reality video was filmed at Mangoola Coal in November. A draft version of the video was on display at the annual forum and drew good reviews from users. Work has now started on polishing the video to make it more informative and educational including using the Dialogue's messaging as a script. The current VR video features individual "visits" to different mining processes which can be quite time consuming a second, briefer and easier to use "summary" video is also being developed which will allow more people to virtually visit a mine at our community engagement events and in classrooms.
- The Dialogue website has recently been updated with papers and minutes from 2018, as well as the 2018 Forum Report. A website upgrade will likely commence in the latter half of 2019.

Media

- In recent media, the School Mine Tours Program continued to generate good publicity with Fairfax running stories and multiple photos of all tours.
- Fairfax also featured positive articles in the lead up to and post-coverage of the Annual Forum.
 The forum also drew good coverage from ABC Radio and Radio 2NM. Radio 2NM also broadcast live from the forum, providing live interviews with Dialogue representatives and supporters and promoting the Dialogue's activities.
- @thecoalface provided its usual positive support with coverage of the School Mine Tours
 Program and previews of the Annual Forum in its October and November editions followed by a
 forum summary and an article on the farewell of Dialogue stalwart Gill Eason in December.
- Vacancies for community members in the Dialogue's Working Groups and JASC have been publicised through advertisements and an article submitted to the Singleton Argus, Muswellbrook Chronicle, @thecoalface and on Facebook

FOR INFORMATION

Agenda Item 10

UPDATE ON OTHER DIALOGUE WORKING GROUPS/COMMITTEES

The Dialogue has several Committees and Working Groups with differing objectives. It is important that information and knowledge is shared amongst these groups to help inform discussions within this Working Group regarding the Dialogue's communication activities. Please see below for updates on the other Dialogue Working Groups and Committees:

Joint Advisory Steering Committee

The Dialogue Chair and Secretariat have recently met and agreed to reschedule meetings to enable more useful analysis of projects and issues by the Working Group meetings, prior to the JASC meeting.

Gill Eason recently resigned from the JASC at the end of 2018. The Dialogue is now looking for a new community/business member and is currently advertising. The Dialogue is open to suggestions from IEWG members. The JASC is scheduled to meet on Tuesday 5 March 2019 to review the feedback provided by the other Dialogue Joint Working Groups.

Communications Working Group

The Communications Working Group held its inaugural meeting on Tuesday 18 September 2018, with representatives from six of the nine industry partners and one community member. Allyn Hamonet was nominated as the Chair, which was supported by the Working Group. Topics discussed, included:

- The prevalence of air quality concern within the community with a suggestion to consider holding information sessions with the community, as the Dialogue has previously done.
- Members reviewed the draft terms of reference and found these to reflect the intent of the working group's objectives well, providing no further comments or amendments.
- Members noted the vast amount of past and current projects that the CWG can draw on to create material and improve communication with wider stakeholders
- Members encouraged the Dialogue to continue promoting project updates via the newsletters and encouraged to look at creative opportunities to showcase Dialogue projects.
- Members noted the progress of the school mine tours program and were keen to understand
 more about the communications component of the tours, namely the information provided to
 sites and schools. Members agreed that the personalised tour posters for each site/school was
 a good idea, and were pleased that this had resonated well onsite, as we are seeking to raise
 awareness of the Dialogue within industry as well.
- Members discussed the upcoming Forum and how to secure attendance. The local Chambers have previously focus on local procurement to good attendance,

The Communications Working Group held its second meeting on 14 February 2019 to review the feedback from the 2018 Forum discussion sessions and determine its approach to projects and activities in 2019. In particular:

- Members noted the Dialogue's recent discussions with RDA Hunter on a STEM project proposal
 which is seeking to leverage off the Dialogue's technical expertise and work done through the
 School Mine Tour Program. Several project ideas from the 2018 Forum would be supported
 through the program should this be implemented.
- Members also provided advice for the Dialogue to consider to help improve our engagement with stakeholders and encouraged utilising technology where possible via apps and short videos to keep students and other stakeholders interested in our activities.

Joint Economic and Social Development Working Group

The Joint Economic and Social Development Working Group's inaugural meeting was held on Thursday 18 October 2018, with six of the nine industry members represented, as well as both Muswellbrook and Singleton Councils, and Muswellbrook Business Chamber in attendance. Ngaire Baker (Mount Pleasant Operation) nominated for the position of Chair, which was supported by the Joint Working Group.

Members discussed the establishment of the Working Group. Members provided some suggested additions to the Terms of Reference which were left deliberately vague, encouraging more detail be provided on the Group's purpose, who they should be advising, and whether this was an information- or strategy-focused group. The specific objectives that members provided include:

- Facilitate communications between the business community and the mining sector by gathering information and sharing across the Dialogue and member networks;
- Identify economic development-related issues and direct to the appropriate organisations to be addressed, where possible;
- Consider developing projects to improve short-term economic development opportunities in the Upper Hunter, where they are yet to be addressed through existing initiatives; and
- Provide feedback and advice to the JASC on matters discussed and refer long-term strategic economic and social development matters to the JASC for consideration.

Members supported the involvement of the Upper Hunter Shire Council as an appropriate stakeholder, with David Gatwood, Business Services Manager, accepting the invite to join the Group.

Members recommended enhancing the Forum's focus on the School Mine Tours Program and VR technology by seeking the involvement of TAFE, local schools and University of Newcastle, as well as key suppliers such as Thiess, and personnel from proposed/upcoming local projects.

FOR INFORMATION/DISCUSSION

Agenda Item 11

OTHER BUSINESS

Agenda Item 12

NEXT MEETING / CLOSE

The next meeting for the Joint Environment Working Group is due to be rescheduled shortly to follow the new Working Group/Committee structure. Members will receive an invite shortly, likely around late April/early May.

The 2018 Annual Forum will be held at the Civic Centre, Singleton on **Tuesday 19 November 2019**. Save the dates will be sent out to all stakeholders in the coming months.

FOR INFORMATION