Upper Hunter Mining Dialogue

Report on the December Workshop 2013





Jim Morgan (Wybong Action Group) and David O'Brien (Glencore) discussing projects in the open space session

About the workshop

On 3 December 2013, groups involved in the Upper Hunter Mining Dialogue met to review progress of the Dialogue during 2013, and to consider how the Dialogue can continue to evolve to meet its goal of bringing together the Upper Hunter to tackle the cumulative impacts of mining.

This is the second annual Workshop. The first Workshop held in December 2012 concluded that an annual gathering of the many groups involved in the Dialogue was a helpful way to keep track of the progress of the many Dialogue projects and to consider broad issues such as how the Dialogue is governed, whether it is making good progress and the issues it should be tackling.

The Dialogue is a different way of tackling cumulative impacts and continues to be an evolution. As part of that evolution, this year's workshop was planned by a group including representatives of the community, local government and industry.

The workshop itself was also a joint effort, with members of each of the Joint Working Groups presenting on the progress of their current projects. The Workshop also embraced a new first, presenting the work of each of the Joint Working Groups through open space displays.

About this report

This report captures all of the written feedback from the Workshop. Some small additions/ amendments have been made to the written feedback where it is necessary to assist the reader (expansion of acronyms etc). Thank you to John Drinan and Neville Hodkinson (Singleton Shire Healthy Environment Group), Dan Boyd (CFMEU) and Leonie Ball (Singleton Beef and Land Management Association) who reviewed the draft report.

Next steps

Valuable feedback on the projects was provided during the workshop and this will be considered by the Joint Working Groups and industry as the projects are developed and implemented. Each of the Joint Working Groups will consider this report during their first meeting in 2014.

Each year all of the staff from the nine participating companies who are involved in the Dialogue come together to look at the Dialogue collaboratively as an industry. This workshop will be held in early 2014, with a focus on how to make the Dialogue more effective. The ideas generated in Session 3 will provide the basis for the workshop.

Thank you

The NSW Minerals Council and our Upper Hunter Members would like to thank everyone who participated in the workshop and throughout the year, particularly the hard working members of the Joint Working Groups and Housing Research Steering Group.

Special thanks to:

- John Drinan (Singleton Healthy Environment Group), Di Sneddon (Singleton Argus), Joshua Brown (Muswellbrook Shire Council), John Watson (Glencore), John Furner (Muswellbrook Coal Company), Gary Bailey (Bloomfield Collieries) for their work in planning the workshop.
- The Joint Working Groups members who presented and hosted the open spaces:



Leonie Ball and Neil Nelson (Singleton Beef and Land Management Association), Craig Strudwick, Nigel Charnock and David O'Brien (Glencore), Chris New, Shannon Garcia and Bill Baxter (Coal & Allied), Melinda Hale and Steve Clarkson (Singleton Council), Sarah Knoll (BHP Billiton), Suzanne Cryle and Troy Favell (Peabody Energy), Joshua Brown and Sharyn Franks (Muswellbrook Shire Council), Wendy Bowman (NSW Mine Watch), Ken Bray (Hunter Valley Water Users Association) and John Drinan and Neville Hodkinson (Singleton Shire Healthy Environment Group).



Session 1 - Project presentations and discussion



Leonie Ball, Singleton Beef and Land Management Association and Table 7 discussing land management projects

The first session of the workshop started with brief presentations from members of the Joint Working Groups to provide updates on current projects and introduce the new projects for 2014. Participants then worked at their tables to identify questions that they had with regard to the projects.

A brief description of all of the current and new projects is provided in **Appendix A**. For more detailed information on the projects, please go to <u>www.nswmining.com.au</u>, click on *Publications* and open *Upper Hunter Mining Dialogue Update and New Projects December 2013* or click <u>here</u>.

The questions were recorded on butchers paper and were added to the relevant open space to prompt discussion. In addition this report and the questions will be considered by each of the Joint Working Groups in their first meetings in 2014.



Table discussions

Water
Table 1
 Final void usage – options for use of water? 'Re-injection' definition please – use of technical terms Was ground water included in the water usage map? If so has the CSG industry contributed in the input- output data?
Table 2
 Is there any research being done into how mine discharge water quality can be improved for further reuse? We like the projects and look forward to the reports. Salinity trading scheme has been a success – those involved deserve credit for this. Is impact of quality of groundwater entering creeks/rivers being investigated? IRT groundwater leaching in and out of mine workings? Impact of quality of water in these creeks/rivers
 Is impact of other non-point sources being investigated e.g. farm runoff, stormwater. Table 3
 CSG link? Impacts of additives used in recycled waters Where are different sources of contaminants Background levels before discharge Monitoring naturally occurring salinity in underground aquifers
Table 4
Is water accounting data going to be presented for individual mines?
Table 5
 What is the plan for sharing and reporting water issues and information and data? What is the cumulative long term impact of water discharge on the river system?
Table 6
 Is there a way to communicate MCA Water Accounting Framework results? What are the next steps for MCA Water Accounting Frameworks?
Table 7
 Has a consistent approach been used between sites with regards to meter types? Have government departments bought into the water mapping project
Table 8
 Water quality and assessment of impact caused by reuse / recycle use? e.g. dust from haul roads (contaminants) Is there a need for additional monitoring along the Hunter River for metals? Can trading scheme cover other contaminants? Are the levels of metals in the Hunter River safe? Is the water tested prior to discharge? Consistent substances tested. What are the current salinity targets and have they changed? What are the impacts to the Hunter River by industry type?
Table 9
 Why are outputs greater than inputs?
 Given the importance of water, is enough work being done and is it properly targeted? What are the main issues for the community?

• What are the main issues for the community?

Mining Upper Hunter Mining Dialogue

Water

- Why are we still information gathering for the Hunter? We should be past this.
- More can be done to educate the community re water and issues.

Social Impacts and Infrastructure

Table 1

- Are we going to detract from Resources for Region (RfR) or Hunter Economic Infrastructure Plan (HEIP) funding?
- Housing project what effect, if any did the MAC camp decision have on the study?
- Will supporting a bypass "help" the community?
- Can we use lessons learnt from Western Sydney example to help the Upper Hunter?

Table 2

- Are the key councils on the same page yet?
- Is there a framework to allow councils to reach agreement on priority infrastructure projects?
- Is JWG looking at impacts of roster arrangements on social fabric? E.g. sports, community events
- Is housing still relevant in today's market? How do we plan for changing demands? Who is responsible for meeting housing demands?
- How quickly can councils respond to a looming housing demand?
- Is there a process for health checking in rainwater tanks used for potable supply?
- Address local road issues
- Need a better understanding of social impacts of rail line going through major town centres

Table 3

- Accommodation challenge in spikes
- Mac Housing (short term accommodation) should be discussed before next boom
- Flexibility on diversity of housing
- Regional approach

Table 4

- How do you get councils to collaborate?
- How do we determine priorities?
- How do you work out short term versus long term housing needs?
- How do you improve livability to bring permanent residents to the area?

Table 5

- What is the real progress in councils working together?
- Is there an actual model for a unified approach?
- Who are our leadership groups and what is the process of determining those priorities?
- What is our longterm approach to housing cycles?
- We should applaud Resources for Regions and lobby to extend to a long term program, not just a few years.

Table 6

- What is the objective of the housing research?
- How is the cyclical nature of mining being accounted for in the research?

Table 7

- Has a report been released on the findings of the road show?
- What is the feeling in the community with regard to past and current infrastructure

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Social Impacts and Infrastructure

projects?

Table 8

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- What are infrastructure priorities and how are they determined?
- What was the final outcome of the road show project (summary)?
- Will Singleton Bypass be a priority?
- Who drives applications for mining camps?
- What are the social impacts to small towns? What initiatives can come out of it?
 Preservation of existing communities in Social Impact Assessment (SIA)
 - Is Resources for Regions (RfR) addressing social impacts?
- Are we benchmarking housing in other regions? A similar housing leadership body internationally?
- When/how housing study report released?
- What forum to communicate Dialogue findings to the community?

Table 9

- Can dialogue help facilitate councils agreeing?
- Can we learn from the Western Sydney model?
- Has the housing project taken a holistic approach with respect to support infrastructure, services etc?
- Can infrastructure access available data and analysis by Roads and Maritime Services (RMS) (for example)?

Emissions and Health

Table 1

- Weather forecasting information process Weatherzone engaged to provide notification for 3 month trial.
- Particle Characterisation study shared responsibility on emissions
- Can the weather forecasting be used for other uses, outside of mining?
- Can the forecast be used to assist in planning for the open cut blasts with regards to underground blast fume interaction?
- Will the community notification/alert be able to be understood with / without emission/dust knowledge?

Table 2

- Studies that have focused on PM2.5 need more info on relationship between disease and PM2.5
- Health issue (PM 2.5) & amenity issue (PM10)
- Focus PM10 How mines are managing emissions
- Triggers for weather predictions wind speed major element
- Allow planning for extreme weather events how do we prevent excess notifications?
- Is it possible to do a PM10 characterisation study?
- How will mines respond to weather triggers?
- Can councils contribute to a dedicated weather website? o Independent monitor

Table 3

- More information for community sorting out fact or fiction
- Cumulative impacts use all data sources
- How mines respond to alert
- Recognition of seasonal factors in forecast



Emissions and Health

Table 4

- What are the triggers?
- What do the triggers mean?
- At what point does each site get on board?
- Will it be too generic?
- How will it compare to current models?

Table 5

- How can I find out more and understand it better?
- People's information needs are different. How do we communicate better and in what forms?
- Centralised and standardised group for all four dialogue groups

Table 6

- How many mines are involved in the weather forecasting pilot?
- Did company(ies) suspend operations in recent extreme weather conditions? Was this beneficial?
- Who will judge how mines respond to forecasts?
- What % of companies has a weather forecasting system now?

Table 7

- Why isn't PM10 specification being done in the Upper Hunter?
- When will the 3 month forecasting trial be conducted? (Summer, Winter, Autumn, Spring?)

Table 8

- Clarify what is PM10 and PM2.5?
- What has caused increase in PM10
 - o Key resources (mining, Agriculture, Biosolids)
 - o Seasonal variations
- How effective are mining practices to reduce dust?
 - o Reports to EPA due August 2014
- What is the scope of work for the weather forecasting trial? Key Performance Indicators (KPIs)? Economic impacts?

Table 9

- How to identify actions at each mine
- Information sessions. Where? When? How?
- What research is needed on PM10?

Land Management

Table 1

- Grazing project could this open up access to lease agistment areas of rehabilitation?
- Possible options of different final land use apart from grazing e.g. forestry, vines.
- Define 'analogue site'

Table 2

• Grazing – after a couple of years will pasture treatments be adapted, depending on the outcomes?



Land Management

- If the grazing trials are successful will there be a way of linking this to mine approvals/type of rehab provided in the future?
- Will the outcomes of the trial include the limitation e.g. pre existing soil quality and land types?
- Is 10 head going to be a sufficient sample size?

Table 3

- Can rehabilitation be designed to favour certain industries?
- Can landfill be a use of voids?
- Agriculture as a void use?

Table 4

• Should Land Management and Water Groups collaborate on void issues?

Table 5

- How are the big reference sites being selected?
- Is there an inter-company group touring and learning from existing rehabilitation and working on new strategies?

Table 6

• How does the void project fit in with the synoptic plan?

Table 7

- Who is going to buy/own the cattle for the grazing trial?
- Who will be managing the cattle on the rehab and analogue sites?
- Will the rehab and analogue sites be geographically similar/close?
- Will a BBQ be held after trials for a taste test comparison?

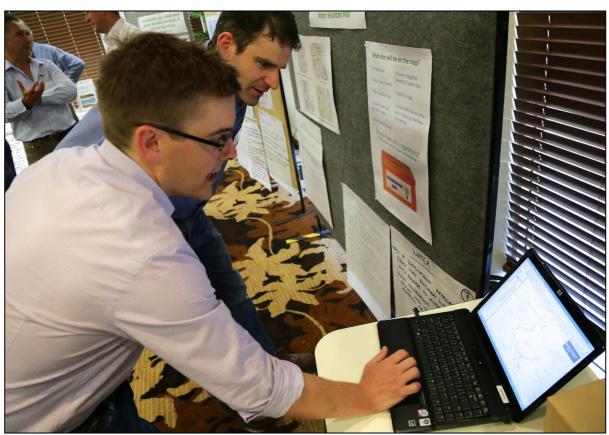
Table 8

- Mine voids water storage address impact / identify if there is an impact or benefit to the water quality?
- Identify treatment for void water e.g. algae
- Is land function analysis part of the grazing study?
- Type of test for pasture quality?
- How will the trial be modified for seasonal effects? e.g. poor cattle health?
- Who will make cattle management decisions?
- How long will it take to rehabilitate a site?
- How long will it take to reduce the dust impact after the mining is complete?

Table 9

- Is there any reference to post-mining land use?
- Where does the synoptic plan sit?
- Voids Key community questions: Community what do they want to see? Local Councils what do they want to see?





Session 2 - Open space and discussion of project results

David Frith (NSW Minerals Council) shows Michael Gale (BHP Billiton Mt Arthur Coal) the different layers of the draft interactive Water Resources Map for the Upper Hunter Valley

Session 2 was an open space session where members of the Joint Working Groups developed stands with information on their projects.

The stands used different media to communicate and interact about the projects, including maps, posters, computer GIS maps, photos and suggestion boxes.

Appendix B sets out a description of the materials used in each of the open space displays.

At the end of the session participants re-grouped at the tables and discussed what they had learned and answered the following questions:

- What are the three most useful results or outcomes that we have found from the discussions?
- What would I want to communicate more broadly because I see it as a useful result from the Dialogue?



Table discussions

Three most useful results or outcomes

Table 1

Good Projects

- Water Accounting Framework
- Grazing trial
- Weather forecasting benefits are yet to be quantified

Table 2

- Release of information through NSW Minerals Council website (transparency)
- Communication between stakeholders in general
- Demonstrated progress with projects

Table 3

- Still having conversation engaged
- Input panel approach for projects

Table 4

• Voids are interesting (lots of options but which are suitable for us?)

Table 5

- Water accounting framework
- The idea of the open session opportunity for general discussion.
- The mood of the session
- Great opportunity to learn about the projects and the proposed work program

Table 6

- Housing research project what will come from this?
- All the groups questions addressed challenge of councils collaborating on infrastructure
- Good level of collaboration, groups involved in projects are good, level of ownership surprising/good

Table 7

- All conversations have been positive and constructive, without negativity.
- Increase in availability of water information from mining industry in conjunction with data from government departments.
- Networking opportunities between industry and other stakeholders

Table 8

- Starting to deal with core issues
- Have a voice in process responding to feedback from the community and a continuing proactive approach
 - Understanding of issues and other points of view
 - o Break down perceptions of industry people (being bad)

Table 9

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- Ability to get stakeholders together mining communities and mining Companies
- Refocus on issues and review what's working and what's not
- Show current success and projects to communities through new "Road show" in 2014



Useful results from the Dialogue that should be communicated more broadly

Table 1

• We need to keep track of projects completed and those parked

Table 2

- Results of particle character study
- WMA Framework
- Grazing trial (collaboration)

Table 3

- Need to get into a broader community CCC
- Link to studies, accessibility of information

Table 4

• Cross – industry engagement

Table 5

(no comments)

Table 6

• Results from water accounting framework analysis

Table 7

• Convey information to more industry groups (dairy farmers etc.)

Table 8

- Project results and data in layman's terms
 - o Website critical
 - o Newsletters like Coalface and the free Hunter Valley News

Table 9

(no comments)



Session 3 - Reviewing the Dialogue's effectiveness and process



Melinda Hale, Singleton Council, John Richards, Bloomfield Collieries and John Furner, Muswellbrook Coal Company

The purpose of Session 3 was to look forward and think about how the Dialogue can continue to evolve in order to stay relevant and make progress.

Participants were given a brief update on the governance developments in the last twelve months, which included implementing new Joint Working Groups for Water and Emissions and Health.

In small groups participants then spent time discussing and developing answers to the question "How do we make the Dialogue more effective?"

All of the ideas generated are set out below. The underlined ideas were voted most important by the table.



Table discussions

How to make the Dialogue more effective

Table 1

- Access to information, to a broader part of the community
- Public space (with staff) display? Council space display?
- A public forum is good but need to have information / data / results to tell them
- Show display
- How to keep projects relevant? Reassessing original ideas/ issues given change to current work environment.
- Community participation
- Missing stakeholders? State govt. Can they be engaged? Are there others?

Table 2

- Allow for opportunities to include younger members (school projects / university)
- Field days or road shows (high school shows etc)
- Do we expand to include other industries that contribute to impacts?
- Make the website more interactive collect community feedback.
- Is there a mechanism to involve government departments? Is there level of involvement adequate?

Table 3

- Got the info now, generate awareness in community
- Bring interested parties to the table outside of industry
- Communicate info to CCC groups
- Framework: Community survey, what dialogue has achieved sample (Singleton, Upper Hunter, Muswellbrook)
- How do you bring vocal people to the table? Don't always get responses back.
- Demonstrate changes that are happening community consultation
- Accessibility of information to community as a result of website:
 structure to dialogue
- Having credible people tell the message (non-government organisation (NGO), government, industry)
- Teachers and educators: knowledge and accurately informed to pass on knowledge to children.
- Tickets to events (conferences, project work (e.g. river mapping) and involvement (for children)
 - More strategic use of investments (community) by mining companies

Table 4

- Bring a friend to a workshop meeting (or have an alternative to be able to attend) to be able to contribute a different perspective)
- <u>Communicate more effectively to those not involved in the dialogue.</u> i.e. community groups CCC.
 - o Not getting information down lower, higher up knows but info not filtering through.
 - Discussion booth on the dialogue website / webpage
 - Coalface to have a section on the UHMD
 - Make website available to everyone / known and communicated with people
 - People in the public and the industry aren't aware of the dialogue or what's happening.
- Correct mix of people involved in dialogue meetings if there is enough industry comm. represented / available to participate

Table 5

• Improved, structured reporting process



How to make the Dialogue more effective

• Formalised and Disciplined

- Better external communication
 - Media, print and radio
 - \circ Web
 - Newsletter / project updates
- Opportunity for those not on the JWG's to put forward ideas before this workshop.
- Not to be too boxed into only having the existing four working groups
- Don't become too insular how do we capture the current issue

Table 6

- Better, broader communication
- Ways to get new stakeholders involved
- Revisit stakeholders list. Are there others that we can add? Are there some that we can re-engage?
- Ensure stakeholders are able to make a difference

Table 7

- Regular systematic review of stakeholder list
- Communicate outcomes and updates between/across all working groups and projects
- Subscribe option on all emails as well as a feedback option.
- Community newsletter to be distributed via letterbox drop and via each sites Community Consultative Committee (CCC).
- Increased collaboration at a higher level (community steering committee)

Table 8

- Opportunities for feedback outside workshops
 - Surveys, newsletters, websites.
- Broaden Stakeholders
 - Website online forum, 2 way communication
 - Keeping focused on key projects and disseminate feedback/good news

Table 9

- Formal review of UHMD every 3 years
- Improved Government Department and regulators involvement
 - i.e. Department of Planning and Infrastructure
 - Office of Environment and Heritage?
 - Environment Protection Authority?
 - NSW Office of Water?
- Above not here today. Local government is here
- Public advertising/ forum to capture greater participants / involvement
- More opportunities for others to learn
- Model works, import to other regions, districts or industries (e.g. CSG)
- Truly consultative approach, not directive
- Collaborative council buy in
- Where are DoPI, OEH, EPA, NOW today?



Reflections on the day

At the end of the last session on the workshop, participants were asked to reflect on the workshop and write down their thoughts.

Reflections

Open space very positive component of the forum. Would be good to sense check the recommendations made so as to avoid "group think".

Educational update of projects, thanks.

I was pleased with the openness and level of interaction of the participants.

It's good to see such effective communication and demonstrated projects result from an initiative some doubted would succeed.

Format of the day with brief introductions into each project followed by time to explore each in the open space was good as it allowed topics of interest to be pursued.

Great information day. Solid Ideas. Open discussion great.

Well structured program which generated high level of engagement. Self congratulation about the success to date of the Dialogue was balanced by awareness of the need for self – criticism through independent review.

Awakening of the need to look ahead (for oncoming locomotives) and not dwell only on the present issues.

Thanks for an excellent day and good facilitation.

Great to have different groups at the tables – exposed to different ways of thinking Is the UHMD type forum happening elsewhere and what can we learn from these alternative/other forums?

Bring dissenting voices to forum.

Good to be part of this.

Becoming more of a collaborative process.

External communication and awareness.

Government departments!

Useful open plan session for getting input into projects. Concerned about losing stakeholders because it is becoming too sanitized.

Dialogue has come a long way – lots of positive information and projects. The challenge is to maintain the momentum.

Positive overall approach, good engagement from those in attendance. Overarching theme of external communication to increase Industry and Community awareness of Dialogue's work and progress.

The open space was a very effective way of gaining an understanding of projects at your own pace.

Feeling positive about the approach the mining industry is taking to address perceptions of environmental and social issues that are held within the community.

Pleased as an industry that we take issues surrounding the industry seriously and are actively trying to improve.



Reflections

Great opportunity to brainstorm ideas and network. Format needs to evolve to complement "website" information / reporting.

Very well facilitated.

Great commitment from all who attended with a positive outlook for the future.

Good to meet new people from a diverse background. Thought that the open space was a good idea.

Interaction was excellent – discussions were amiable and in some cases very detailed. These dialogues are progressing well, but there should have been more persons from government departments.

Open forums for schools and general public, also open days at the Bio Diversity Areas. There should be many more water monitoring points along the river and tributaries Why does Singleton Council <u>not</u> test the river water at Dunolly Bridge now?

Open space session was a good way to have targeted discussions related to a topic/project but also build relationships one on one.

Positive – wheels slowly in motion to rolling along gradually picking up speed (and hopefully <u>not</u> derailing i.e. thing of the past!). Openness and effective communication between groups showing results!!!

I think the day shows how effective the Mining Dialogue is in addressing the issues faced by the mining industry and mining communities from a time of confrontation to a time of cooperation.

Think it's a great opportunity to mingle and get to know other industry and groups in the room.

Ideas across a number of industries can be beneficial for trying to achieve a certain goal and using others different perspective is handy in supporting this.

Encouraging progress in all areas, need to focus on delivery and demonstrating tangible results.

Met my expectations

Worked well:

- Open space sessions
- Table questions following presentation from Joint Working Group. Process matured and is delivering good progress.

Open, productive discussions were held, with all participants. There was a good mix of activities and presentations. All keen to communicate the good work the dialogue is achieving.

Positive – Open space, format (much better) and the table discussions "What do you like about the dialogue?" – Subject is a little tired.

Good open discussion; however there is a risk of this process becoming insular Needs to engage the broader community e.g. through media, public info e.g. shopping centres.

Still feel that the UHMD is a valuable vehicle to resolve community concerns and communicate what industry is doing to operate responsibly.

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Reflections

It is becoming a collaborative process.

Good day with good discussion – mostly constructive. Good adherence to schedule.

I found the day to be full of interesting and good communication. Good to see there is a lot more to be done still and where projects are heading. Positive talk.

Worth every cent. Agreement and alignment.

Good cross section of "affected" community, but I think there are other valuable stakeholders that are missing. e.g. state government, school groups perhaps. It was very reassuring to hear people's recognition of a less hostile environment between opposite sides of the "table".

I wish to see specific details of the various land management and rehabilitation projects being undertaken and the Issues that the ongoing nature of these projects raise.

Impressed to find out so much is being done already. Communicating the findings of projects to the residents would be ideal.

Overall I believe the day was a success. It is encouraging not only to see progress being made by all worthy groups but the genuine dialogue between participating stakeholders, many who have been part of the dialogue since its inception.

Todays' meeting has been a very positive experience for me. There were lots of great discussions on my table. The information at the start of the day was a very helpful tool to bring me up to speed with where everyone is up to. Plus the open space and displays were very insightful.

Communication to broader community.

Next Land Management Project: Rehabilitation for cropping! Has been a great forum to showcase the LIHMD and its work. Hope to be

Has been a great forum to showcase the UHMD and its work. Hope to hear more in the future. Thanks for organizing.

Would love to see a collaboration reporting process of rehab undertaken to date, lessons learnt and what we can do to improve rehab outcomes in future for environment and agriculture.

Constructive day, good new ideas on process for future improvement.

I believe the day was a success. Again to see the industry and the community talking and discussing issues with the pressure kept on industry to deliver outcomes to projects. Better communication and information and outcomes to the broader audience.

UHMD is moving forward though more community involvement is needed. The group is dominated by industry.

The community wanted the UHMD though it seems their numbers are dropping.

Positive to see that all working groups are making significant progress towards completion of projects.



Reflections

Today's meeting has been very positive – need to be careful that we aren't losing touch with those emotive and emerging issues that caused robust discussions earlier in the process?

Good day. Informative. Time to talk. Gain an overview of current issues and projects.

Conclusion

The December Workshop provides an opportunity each year to bring together the participants in the Dialogue to review the progress of projects and the Dialogue more broadly, and to continue to evolve the process so that it continues to make a valuable contribution to reducing the cumulative impacts of mining in the region.

All of the feedback from Sessions 1 and 2 will be considered by the Joint Working Groups as they progress work on current and new projects. The feedback from Session 3 will feed into a workshop with the nine industry participants in the Dialogue to be held early in 2014, which will focus on how we can continue to evolve the Dialogue so that it meets community and industry expectations.



APPENDIX A - Current and new UHMD projects

Water

Engagement with Commonwealth Independent Expert Scientific Committee

As part of our efforts to better understand the water resources of the Upper Hunter, we've engaged with the federal government's Office of Water Science, which is undertaking a bioregional assessment of the Northern Sydney Basin, which includes the Upper Hunter region.

The Office of Water Science presented to the Joint Working Group in November 2013 and provided detailed information on the Bioregional Assessment for the Hunter Valley. The Joint Working Group will keep a watching brief on the assessment and mines will contribute data to the assessment.

Minerals Council of Australia Water Accounting Framework

All of the nine Upper Hunter mine operators are implementing the Minerals Council of Australia Water Accounting Framework. The Framework will not only establish a consistent method of accounting for water extraction, use and discharge across Upper Hunter mines, but will also provide the community, industry and regulators with a clear picture about the industry's water use and opportunities for water-saving initiatives.

Water resources map

We're working with the NSW Trade and Investment, Division of Resources and Energy and the NSW Office of Water to produce a hydrological map of the Hunter Catchment, to develop a better understanding of water resources in the region.

The interactive, online map will display the location and details of water resources, monitoring locations, mines and other landmarks in the region, in a simple and accessible format with links to external data sources (such as water monitoring data).

Hunter River water quality assessment

Members of the Joint Working Group - Water have expressed concerns about the health of the Hunter River. Since this project idea was developed, the Office of Environment and Heritage has begun a review of the Hunter River Salinity Trading Scheme (HRSTS), which includes a review of the health of the river. In 2014 the Joint Working Group will be looking for opportunities to collaborate on addressing any knowledge gaps about water quality that are identified through the review.

Emissions and Health

Communications project

To engage and communicate with the public, in 2013 we facilitated Air Quality Information Sessions for community members in Singleton and Muswellbrook. Representatives from the Environment Protection Authority, the Department of Planning and Infrastructure's Singleton Compliance Office and NSW Health provided updates on the initiatives underway to better understand and manage air quality in the Upper Hunter region.

Communications project - Stage 2

In 2014 we'll be holding air quality information sessions and an open community workshop, with experts presenting to attendees, continuing the success of the communications strategy.

Weather forecasting

Environmental consultants have developed a tool that assesses forecast weather conditions daily and alerts mines about conditions that may contribute to dust generation, such as dry and windy conditions. This will help mines prepare for bad weather, all with the goal to minimise dust. Upper Hunter mines are currently trialling the system.

Community weather forecast notification

While the weather forecasting project focuses on the proactive steps mines can take to manage emissions, there is also the potential to provide information to the Upper Hunter community when poor air quality is forecast. We'll work with government agencies and the community investigate a weather forecast notification system once the mine site weather forecast system (currently being trialled) is up and running.



Land Management

Grazing study

BHP Billiton Mt Arthur Coal and Coal & Allied with guidance from the Joint Working Group – Land Management, have worked with the NSW Department of Primary Industries to design a study to answer the question: Can rehabilitated mine land sustainably support productive and profitable grazing in the Upper Hunter?

Cattle will graze on rehabilitated mine land and on un-mined sites (analogue sites), chosen because they are representative of the area. Over four years, the rehabilitated mine land and un-mined sites will be compared on factors including animal health, soil and pasture composition and economic outcomes.

Investigation of possible beneficial uses for mine voids in the Upper Hunter

We're looking into the various ways mine voids can be rehabilitated to make a contribution to the region long after mining has ended. Our study into the achievable beneficial uses for mine voids will help the community to envisage the post mining future of these areas of the region, allow community members to have their say about possible uses and provide the industry with realistic options.

The first part of the project will involve a review of re-uses of voids worldwide, and will look at potential options in light of the environmental, economic, social and regulatory context of the Upper Hunter.

Biodiversity reference sites pilot

Glencore and Coal & Allied are identifying biodiversity reference sites - ecological communities similar to those being established on mine rehabilitation sites. The reference sites will be monitored at different stages of development, providing benchmarks to assess the development of the same community on mine rehabilitation land.

Rehabilitation Principles and Commitments

The Joint Working Group – Land Management has developed a set of common principles to drive improvements to the industry's rehabilitation efforts, and also provide aggregated data to the community about total land disturbed and rehabilitated in the Upper Hunter.

Social Impacts and Infrastructure

Housing study and possible follow up project

We've commissioned a study to better understand housing needs in the Upper Hunter. The first stage of the study looked at best practice in other mining and resource regions and identified that in the Upper Hunter there is a need for a sub-regional approach to housing, which is currently absent and may be leading to missed opportunities.

The next stage of the study will address the gaps in housing forecasting, work with the councils and others to investigate a sub-regional approach and investigate specific projects that could be undertaken as part of a sub-regional strategy.

A workshop with interested community groups in 2013 agreed that a new project should be drawn from the final recommendations of the research.

Regional collaboration on infrastructure

The industry is investigating whether there is value in better collaboration between the three local councils of the Upper Hunter, local business chambers and industry to ensure State and Commonwealth governments to fund the region's essential infrastructure.

Infrastructure roadshow

This project is now complete and involved meeting with local councils, business chambers and community groups to develop a better understanding between these groups and our industry about the infrastructure needs of the region. Information gained from the roadshow has allowed the NSW Minerals Council and industry members of the Dialogue to lobby more effectively for infrastructure for the Upper Hunter.



December 2013 Workshop Report

APPENDIX B - Open space content

This appendix describes the material that was used by Joint Working Group members in the open space sessions to explain their projects. Copies of any of these materials are all available from the NSW Minerals Council upon request.

Joint Working Group Land Management

Grazing Study

- A poster showing the agreed objective of the study "Can rehabilitated mine land sustainably support productive and profitable livestock grazing?".
- Photos of mine rehabilitation grazing site and analogue grazing site and maps showing location of the sites for Coal & Allied and Mt Arthur.
- A list of monitoring/ testing that will be undertaken on the sites.

Biodiversity reference sites pilot

- Photos of both the communities that will are involved in the pilot (naturally occurring, not rehabilitation).
- A satellite image of the Upper Hunter with an overlay showing the distribution of the communities.
- Photos of rehabilitation to the target community at Mt Owen.

Temporary and Final Rehabilitation Principles and Commitments

- Blown up copy of the Principles.
- Blown up copy of the rehabilitation reporting metrics.
- A poster setting out Goal 1 for Land Management which the project is designed to drive 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.
- Print outs of the Principles.

New Project – Beneficial re-use of voids

- The project scope.
- Pictures of Australian and international examples of void res-use.
- Laptop with an automated slide show illustrated how a mine develops and the resulting void (this is the presentation that Clarence gave at the Joint Working Group meeting in July 2013).
- Copies of an interesting article from Spiegel (German Newspaper) about a lake district that is being formed in the former East German region of Lustia (pictures of the area are included on the pin boards).

Joint Working Group Water

Engagement with Commonwealth Independent Expert Scientific Committee

- A summary of the methodology for the bioregional assessments.
- A map showing the extent of the Hunter bioregion.
- Images showing water dependent assets and receptors.
- A hand-out about the bioregional assessments.

Minerals Council of Australia Water Accounting Framework

- A pie chart showing a preliminary analysis of water inputs and outputs by mining companies in the Upper Hunter.
- A bar graph comparing the water quality of inputs and outputs from the preliminary analysis.

Water resources map

- A poster showing screen captures of the preliminary draft water resources map, with different layers turned on and off.
- A laptop with the preliminary draft water resources map loaded.
- A suggestion box asking for suggestions for improving the water resources map.

MINING Upper Hunter Mining Dialogue

Hunter River water quality assessment

• The project scope.

Joint Working Group Social Impacts and Infrastructure

Housing study and possible follow up project

- The project scope.
- A summary of the housing related strengths, weaknesses, opportunities and threats in the Upper Hunter region.

Regional collaboration on infrastructure

The project scope.

Infrastructure roadshow

- The project scope.
- A poster showing funding received in the Upper Hunter region from the Resources for Regions program and the Hunter Infrastructure and Investment Fund.

Joint Working Group Emissions and Health

Communications Strategy 2013

Posters that included pictures from air quality forums.

Communications Strategy 2014

- A poster showing ideas for future forums.
- A suggestion box asking for communication ideas.

Weather Forecasting Project

- A poster showing a graph of the relative contributions of different emission types.
- A poster showing a graph of winter peaks.

Community Notification Project 2014

- A poster showing a graphic of what a notification may look like.
- A poster showing a sample of what the daily email alert will look like.

General information relating to Emissions and Health

- A poster showing dust control measures that are part of the Pollution Reduction Program.
- A poster showing the size of PM2.5 particle relative to a human hair and why PM2.5 are an issue.
- A poster showing the relative contribution of emission sources (Upper Hunter Air Quality Monitoring Network).
- Singleton Shire Healthy Environment Group contribution A whiteboard outlining concerns about emissions from blasting.

