



AGENDA

Upper Hunter Mining Dialogue

Joint Working Group - Combined Land Management and Water Meeting

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

Wednesday 28 March 2018: 10:00 am to 1:00 pm Local

dial in: 02 8319 9443

Participant code: 100 170 27 / Organizer code: 594 774 15

Agenda items		Attachments
Water		
1.	Welcome and Apologies (5 mins)	
2.	Minutes and actions of the previous meeting (5 mins)	
3.	Hunter River Water Quality Study (10 mins)	Attachments
4.	Water Accounting Framework 2016 results (15 mins)	Attachments
5.	Update on current water projects (10 mins)	
6.	Other water business (5 mins)	
Combined Session		
7.	2017 UHMD Annual Forum Review (20 mins)	Attachments
8.	2018 Strategic Discussion (20 mins)	
9.	Synoptic Plan Review Update (5 mins)	Attachments
10.	Update on communications activities (10 mins)	Attachments
Land Management		
11.	DRG Rehabilitation Reform Project Update (10 mins)	
12.	Rehabilitation reporting 2016 results (15 mins)	
13.	Update on current land management projects (10 mins)	
14.	Other land management business (5 mins)	
15.	General Dialogue matters (5 mins)	
16.	Next Meeting / Close (5 mins)	

**UHMD Joint Working Group - Water and Land Management
28 March 2018**

Agenda Item 2

MINUTES AND ACTIONS FROM PREVIOUS MEETING

DRAFT MINUTES

**Upper Hunter Mining Dialogue
Joint Working Group Water and Land Management Meeting**

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

Wednesday 11 October: 10.00 am- 1.00 pm

In attendance

Bill Baxter (Chair)	Yancoal
Julie Thomas	Muswellbrook Coal
Hannah Bowe	Bloomfield Group
Dominic Brown	Yancoal
Glenda Briggs	NSW Department of Primary Industries
Melinda Hale	Singleton Council
Cameron Archer	Tom Farrell Institute
Jim Morgan	Wybong Action Group / NSW Farmers Federation
Neil Griffiths	Department of Primary Industries
Catherine Lewis	Division of Resources and Geoscience
Ken Bray	Hunter Valley Water Users Association
Ron Fenwick	Wambo CCC / Community Individual
Julie Fletcher	MACH Energy (Observer)
Bob Mackie	theresource
James Barben	NSW Minerals Council
Craig Milton	NSW Minerals Council

Guests

Thava Palanisami	Newcastle Institute for Energy and Resources, UoN
Richard Bush	Newcastle Institute for Energy and Resources, UoN
Dayjil Fincham	Hydro Engineering & Consulting (via teleconference)

Apology

Karen Marler	NSW Environment Protection Authority
Dee Murdoch	AECOM
Jo Powells	NSW Department of Primary Industries
Sean Constable	Upper Hunter Shire Council
Simon Francis	DPI Water
Paul Amidy	Glencore
Laurie Perry	Wonnarua Nation Aboriginal Corporation
Nigel Charnock	Glencore
Neil Nelson	Singleton Beef and Land Management Association
Leonie Ball	Singleton Beef and Land Management Association
Tim Roberts	Tom Farrell Institute

1. Welcome and apologies

The Chair welcomed attendees and noted apologies. Mr. Barben introduced himself as the new Director, Policy for the NSW Minerals Council, replacing Greg Sullivan and thanked Mr. Sullivan for his work on the Dialogue over several years.

2. Minutes and actions of the previous meeting

The minutes and actions were accepted by members. Mr. Milton provided a brief update on outstanding action items, noting that several actions are addressed in these papers, or are currently in progress.

A discussion on the Synoptic Plan took place, with members advising that the UHMD needs to be very focused on what we want from this particular plan, as there is a risk that DPC may drift and develop a plan on their own. Members noted that it was important that DPC have a statement from the Dialogue, rather than individual input, as this will stipulate the importance of consultation with the community.

ACTION:

- **UHMD Secretariat to capture key community concerns with the Synoptic Plan to provide to the Department of Premier & Cabinet.**

3. Presentation: Neil Griffiths, *Upper Hunter Grazing Study - Key Findings and Future Research*

Mr. Griffiths provided a detailed overview of the key findings of the cattle grazing study. The presentation was well received by members and generated significant discussion. Mr. Griffiths noted that because of the way the study was purposely managed, it is difficult to apply statistics. As such, there are limitations to the wider application of the key findings. However, it does provide some key discussion points, and the follow-on proposal, if successful will look to expand on these findings.

Mr. Griffiths noted the high level of industry commitment for both the grazing study, and the current ACARP proposal being considered.

The final report of the grazing study has been submitted to ACARP, which features many of the graphs contained in the presentation today. Mr. Griffiths will be presenting to the 2017 Forum on this topic, with a simpler presentation.

4. Rehabilitation Reporting & Principles Project

Mr. Milton provided a brief overview of the 2016 rehabilitation reporting figures for Dialogue members, noting that these preliminary figures are close to being finalised, and will be reviewed internally and distributed to the Industry Steering Committee for a final review before publishing.

5. Rehabilitation and Mine Closure Update

Mr. Milton provided an update on the Senate Inquiry into mine rehabilitation, noting that the reporting date will be delayed until Autumn 2018.

Mr. Barben provided an overview of the successful ICMM Mine Closure Workshop, held in the Hunter in August 2017, noting it was a great opportunity to promote the projects of the Dialogue. Members asked whether there were any learnings or outcomes from the workshop that may be shared with the wider Dialogue community. The Chair advised that he received some communication from ICMM following the workshop and would send through to the UHMD secretariat to consider distributing to members.

ACTION:

- **Mr. Baxter to send post-workshop ICMM Mine Closure communications to the UHMD secretariat to review and distribute information to members where relevant.**

6. Update on current Dialogue Land Management Projects

Mr. Barben provided an update on other projects not previously captured in the agenda.

With regards to the Voids research project that Ms. Fincham is currently finalising, members queried what the UHMD will be doing with the information collected. Mr. Barben advised that the Rehabilitation and Mine Closure Working Group is looking at voids from an industry perspective and is progressing with fact sheets as part of the Beneficial Reuse of Voids project.

Mr. Barben noted that the main challenge for the Upper Hunter is that there is no void currently available for closure to establish a baseline of information. Members noted that while there is work being done by

NSWMC, it is not necessarily seen by the community and that there needs to be more effort put into influencing the Government and Planning Department improvement documents mechanisms that are more amenable to community expectations.

Mr. Barben noted that the Annual Forum would be a good opportunity to raise many of these points. Members agreed that Ms. Fincham's research should provide some guidance which will help develop a regional vision.

7. Other business - Land Management

No other business was discussed.

8. Synoptic Plan Review Update

Mr. Barben provided an overview of the Synoptic Plan Review process and noted that they are yet to make huge inroads in developing content but are working to ensure they stay on the right track. Mr. Barben advised the discussion session at the Annual Forum would be a great opportunity to assess the work being undertaken and provide comment from the Dialogue collectively on the future direction.

The Chair advised that DRG is currently working with industry to pull together a lot of the data and information identified by the community in a more dynamic format, including rehabilitation GIS data, which Ms. Lewis confirmed had quite a wide uptake so far, even in voluntary phase.

9. School Mine Tours Program

Mr. Mackie provided a brief overview of the School Mine Tours Program and advised that the first run of tours would be commencing in the coming weeks with Year 9 students from Singleton High School. All schools in the region are involved except for two, which has been a great level of engagement. Members queried the format of the tours and what they involved. Mr. Mackie advised they are all to be roughly 2 hours in length including travel to and from site, with students able to see the complete mining process on site from an unbiased viewpoint. Students will be able to take photos and are required to complete worksheets as part of this education module.

Members discussed the value of the program and noted that there really needs to be a take home message that kids can provide to their families for this program to have real impacts.

10. 2017 UHMD Annual Forum

Mr. Barben provided an update on the Forum agenda noting that this has been finalised and provides many opportunities for community feedback. A suggestion from the Industry Working Group was to provide some pre-reading material to attendees so that they can prepare themselves for discussion and stimulate some thinking, and to also set some parameters for what will be discussed, so the sessions can be managed easily.

11. Beneficial Reuse of Voids Fact Sheets

Mr. Milton provided an update on the Beneficial Reuse of Voids project fact sheets and noted there was a limited opportunity to provide feedback on the sheets, and that comments would need to be provided as soon as possible.

12. Update on communications activities

Mr. Mackie provided an overview of the various communications activities the UHMD is undertaking. Mr. Milton summarised the key findings from the UHMD Community Surveys, with members interested in these findings and how they may be used to improve our engagement. Members encouraged breaking down the rehabilitation question into more specific points that the community is interested in. Members were also keen to see the sentiments of those inside the area and outside the area.

13. Presentation: Professor Richard Bush & Dr. Thava Palanisani, *Hunter River Water Quality Study*

Professor Bush and Dr. Palanisani presented to the working group on the key findings of the water

quality study and thanked all industry personnel and community members involved in the study. Prof. Bush explained the parameters of the study noting that it aligns with government testing sites and has received independent laboratory analysis. The results have shown that nothing met or exceeded water quality guidelines and that water in the storage sites are equivalent to that contained in the river. There are elevated levels of certain metals which are indicative of the areas sampled being close to mines and power stations, but these are nowhere near levels that pose any risk to health.

Members were pleased with the findings and questioned exactly what would be reported, as salinity levels and spatial data would be helpful. Prof. Bush advised he is still pulling together the report and undertaking statistical analysis of the data. Members suggested a simple fact sheet in layman's terms would be beneficial, and Prof. Bush advised he would be happy to provide this.

ACTION:

- **UHMD secretariat to present preliminary findings data to the JWG for reference.**
- **UHMD secretariat to liaise with Prof. Bush to determine how the key findings could be included in a fact sheet.**

14. Presentation: Dayjil Fincham, *Water Accounting Framework - Preliminary Results for 2016*

Ms. Fincham joined the working group to provide a snapshot of the preliminary findings from the 2016 collection of industry data.

Ms. Fincham advised that there is not too much change in the mine site data and generally no major outliers of inputs or outputs for 2016. The only note that Ms. Fincham provided was that the reuse efficiency had gone down to 47% from 50% in 2016, which is likely attributed to an increase in rainfall that year.

The Chair advised that members at previous working groups were keen to see trending data incorporated where relevant. Ms. Fincham advised that we can make a start on this, however, there's likely to not be a great deal we can take from the 3 years of data so far.

Ms. Fincham advised there was a comparable discharge amount this year to 2015, which still equated to less than 1% of the total water in the Hunter River system.

15. Update on other Dialogue water projects

Mr. Barben provided a brief update on the bioregional assessments programme, with members querying their wider applicability. Mr. Barben advised that the only mandate from the government agencies involved is to provide the assessments at this stage.

16. Other business

Ms. Hale advised the working group that Singleton Council is forming a Weeds Advisory Committee to respond to criticism levelled at Council and are looking for participation from local mines to join local land care groups. Ms. Hale will contact Dialogue contacts from each mine in the Singleton LGA shortly.

17. Next meeting / Meeting close

The draft meeting dates for 2018 were provided to the working group for reference.

The meeting closed at 1:15 pm

**Actions arising from meeting on 17 October 2017
UHMD Water Joint Working Group Meeting**

Action	Responsibility	Status
Synoptic Plan Review Update		
<ul style="list-style-type: none"> • UHMD Secretariat to capture key community concerns with the Synoptic Plan to provide to the Department of Premier & Cabinet. <p>Note: Summary document prepared.</p>	UHMD Secretariat	In progress
Rehabilitation and Mine Closure Update		
<ul style="list-style-type: none"> • Mr. Baxter to send post-workshop ICMM Mine Closure communications to the UHMD secretariat to review and distribute information to members where relevant. 	Mr. Baxter	Completed
Hunter River Water Quality Study		
<ul style="list-style-type: none"> • UHMD secretariat to present preliminary findings data to the JWG for reference. 	UHMD Secretariat	Completed
<ul style="list-style-type: none"> • UHMD secretariat to liaise with Prof. Bush to determine how the key findings could be included in a fact sheet. <p>Note: Engagement with Prof. Bush is ongoing as the report is being finalised.</p>	UHMD Secretariat	In progress

**UHMD Joint Working Group - Water and Land Management
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Agenda Item 3

HUNTER RIVER WATER QUALITY STUDY

Issue

The Hunter River Water Quality Study is close to being finalised and work is currently underway to prepare the final report.

Background

The Hunter River Water Quality Study is a key Dialogue water project, arising from the Joint Working Group. Water sampling for the study was undertaken in the latter half of 2017 with the objective of providing an assessment of the background concentration of a range of metals and metalloids both in the Hunter River and Hunter River Salinity Trading Scheme discharge sites. The study was overseen by Professor Richard Bush and the team from the Newcastle Institute for Energy & Resources at the University of Newcastle.

The EPA supported the proposal and agreed to work with the community and industry to conduct the study. AGL also agreed to participate in the study given their discharge site within the scheme. The community and the Dialogue was represented via Ken Bray's participation on the advisory group to establish the study's parameters.

Preliminary results were provided to key stakeholders in October and November which indicated that general metals concentrations in the HRSTS dams were very low, and that the system is performing well overall. **Attached** with these papers in a separate document is a PDF of the presentation that Professor Bush delivered to attendees at the Dialogue's Annual Forum in November 2017 for reference.

The advisory group is working with Professor Bush, industry and the EPA to finalise the report. The EPA appears to be satisfied with the results of the study and have provided feedback to Professor Bush to enhance the draft report.

The UHMD secretariat is working to progress the next steps for the study, including:

- Liaising with Professor Bush to finalise the study's report, incorporating both industry and EPA feedback. The Joint Working Group has also suggested developing a fact sheet version of the report, and this will be explored further once the revised draft of the report is made available.
- Liaising with Professor Bush on a scope for potential future studies related to water quality in the Upper Hunter.

FOR INFORMATION / DISCUSSION

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Agenda Item 4

WATER ACCOUNTING FRAMEWORK FIGURES 2016

Issue

The Water Accounting Framework results for 2016 have been finalised and published. The UHMD secretariat is now looking to commence the collection of the 2017 data from industry.

Background

The 2016 final Water Accounting Framework infographics have been released and are **attached** for reference on the following pages.

Key highlights from the 2016 results include:

- 2016 was a slightly wetter than average year, with 274 billion litres entering the river system in the Upper Hunter. Over 471 billion litres of water entered the system in 2015, with 62% of that water staying in the river.
- The amount of water extracted by farmers, residents and businesses in 2016 was 36%. This increased from 21% of total water used in 2015.
- The mining industry used just 2% of water in the Upper Hunter River System, up from 1% in 2015, but less than 3% used in 2014.
- The mining industry reused 47% of its water onsite, slightly down on previous efficiency results of roughly 50%.
- Only 4% of mine water was discharged into the Hunter River. Given it was a wetter than average year, this allowed for flow conditions in which some discharges are permitted.

Industry members will be contacted shortly to arrange for the collection and analysis of 2017 data to ensure prompt publication of results in a timely manner. The UHMD secretariat is keen to hear feedback from Joint Working Group members on any improvements or refinements that can be made to the project to enhance the project.

Representatives from the Geological Survey of NSW (GS NSW), which sits under the Division of Resources and Geoscience, recently met with the Dialogue's industry members to discuss how the Water Accounting Framework might be utilised in NSW government reporting requirements. GS NSW were pleased with what the Dialogue had accomplished in implementing the framework across the Upper Hunter and saw significant value in the standardised reporting, as well as benefits that might be derived in being able to better predict water usage trends and availability in drought conditions.

FOR INFORMATION / DISCUSSION

UPPER HUNTER WATER BALANCE 2016



Mining's water use

The Upper Hunter Mining Dialogue assessed water use by the mining industry in the Upper Hunter in 2016. Using a common accounting framework, mining companies have reported their water inflows and outflows from operations. This has helped them to manage their water use and embark on water saving and reuse opportunities.



Hunter River System Extraction



Mining Industry Water Use Balance



ALMOST **7x**

as much water evaporated from the Hunter River System storage dams as was extracted from the Hunter River System by mining companies

The mining industry used **JUST 2%**

of water in the Upper Hunter River System

ONLY **10%**

of mine water came from rivers and alluvial aquifers

55%

of mine water was sourced from onsite rainfall and runoff

28%

of water was sourced from deep aquifers that are of limited use to other water users due to their high salinity

The mining industry **REUSED 47%**

of its water onsite

ONLY **4%**

of mine water was discharged into the Hunter River

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

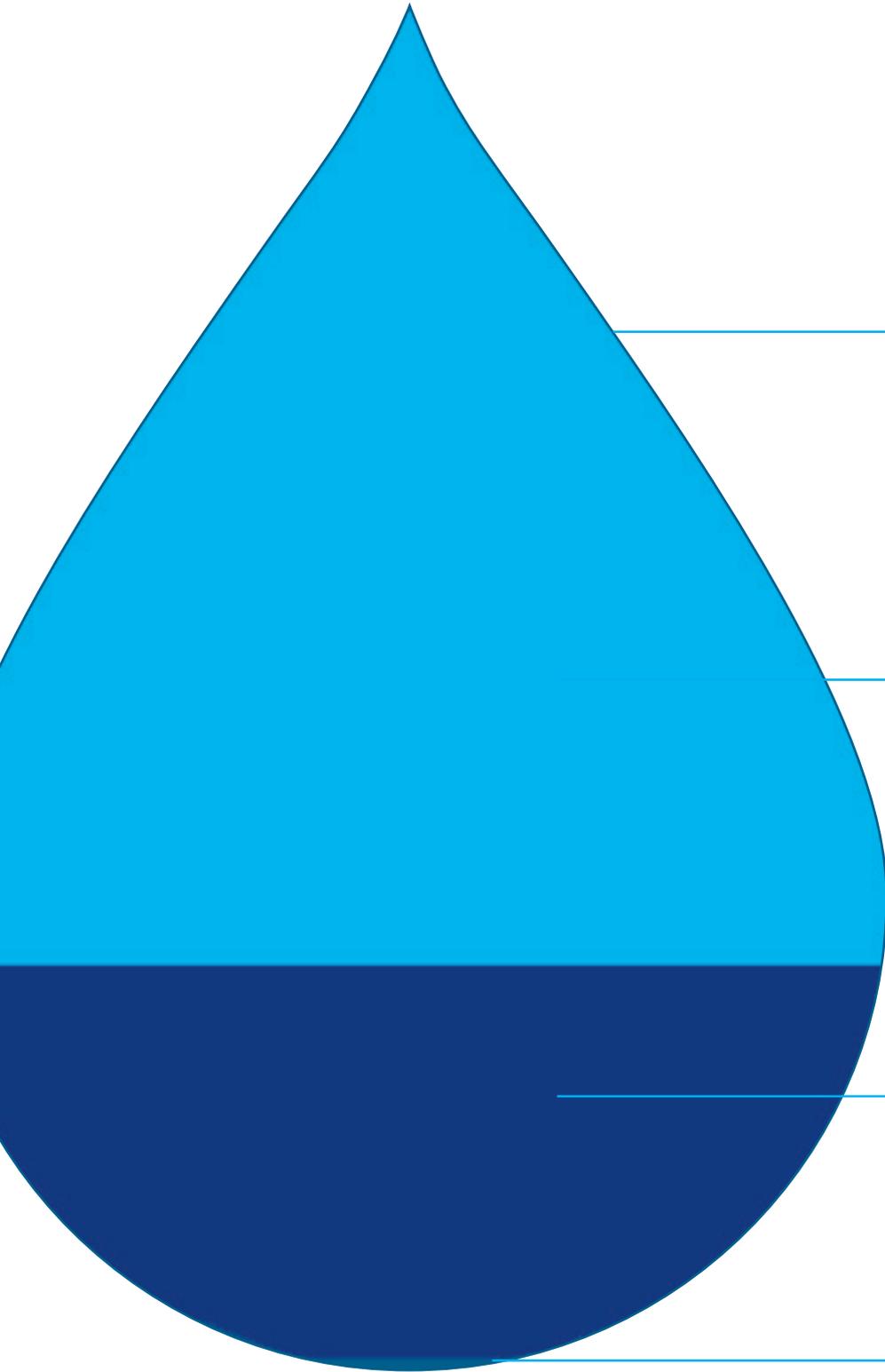
The NSW Minerals Council has compiled the data in this infographic using the best available information. Since water accounting is a complex task that relies on estimates and computer models, there are corresponding limits to the accuracy of the information. Sources: Bureau of Meteorology; DPI Water; NSW Minerals Council data.

THE HUNTER RIVER 2016

A precious water resource for the Upper Hunter community.



Upper Hunter Mining Dialogue



2016 was a wetter than average year. That year

274 BILLION LITRES

entered the river system in the Upper Hunter.

62%

of that water stayed in the river.

The amount of water extracted and used by farmers, residents and businesses was

36%

MINING

used less than

2%

of the water in the system.

To find out more, visit miningdialogue.com.au

The NSW Minerals Council has compiled the data in this infographic using the best available information. Since water accounting is a complex task that relies on estimates and computer models, there are corresponding limits to the accuracy of the information. Sources: Bureau of Meteorology; DPI Water; NSW Minerals Council data.

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Agenda Item 5

UPDATE ON CURRENT WATER PROJECTS

Please find below an update on the following Dialogue water projects.

Hunter River Water Quality Study

Please see **Agenda item 3** for more information.

MCA Water Accounting Framework

Please see **Agenda item 4** for more information.

Hunter Valley Bioregional Assessment

BA Explorer, a new map-based component of the Bioregional Assessment Program website, is now live:
<http://explorer.bioregionalassessments.gov.au/>

The BA Explorer site displays information about how groundwater levels and surface water flows might change as a result of coal seam gas and coal mining development in a particular region. Results are reported as probabilities – the percent chance that a specified change will happen. Users can choose to show changes that have a 5% chance, a 50% chance or a 95% chance of happening.

Ecosystems, represented by landscape classes, and water-dependent assets are overlaid on the zone of potential hydrological change (the area where changes in groundwater or in surface water cannot be ruled out). Overlaps indicate where further work using more detailed local-scale information is needed to understand whether there will be impacts and how large they might be.

Results for the Maranoa-Balonne-Condamine (MBC) bioregional assessment are now available on the BA Explorer. The Maranoa-Balonne-Condamine assessment modelled potential changes to groundwater but did not include surface water modelling. Results for the Galilee, Gloucester, Hunter and Namoi regions will be added to BA Explorer when the assessments are released.

Joint Working Group members are encouraged to use the resource and provide any feedback to the secretariat as we continue consultation with the relevant agencies leading this program.

FOR INFORMATION / DISCUSSION

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Agenda Item 6

OTHER BUSINESS - WATER

NSW water reforms

The NSW Government has announced the launch of consultation papers on key areas of the NSW Water Reform Action Plan. Through the release of these papers and a number of community information sessions, the NSW Government is seeking community input on policies covering:

- Water take measurement and metering
- Transparency measures
- Better management of environmental water
- Floodplain harvesting policy

Regional consultation sessions will be held in Dubbo, Broken Hill, Bourke, Moree, Coffs Harbour, Wentworth, Gunnedah and Griffith over the coming month. Further, over 86,000 letters were forwarded to the various licence holders of across the state.

Ken Bray, of the Hunter Valley Water Users Association will provide an update at the meeting in regard to the compliance detail. The compliance obligations are not likely to be too onerous to those in the Upper Hunter, however, they may be of interest to members holding grazing properties or interests.

The community consultation period closes on 15 April 2018. For information about the Draft Water Management Amendment Bill 2016 and consultation, please visit the Water reform community consultation web page: www.industry.nsw.gov.au/water-reform/consultation.

FOR INFORMATION / DISCUSSION

**UHMD Joint Working Group - Water and Land Management
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Agenda Item 7

2017 UHMD ANNUAL FORUM REVIEW

Issue

The 2017 Upper Hunter Mining Dialogue Forum was held 22 November 2017. This provides an opportunity to assess what worked well and what improvements can be made for future Dialogue events.

Background

a. Short Summary of Table Discussions

For the first discussion session, attendees were asked to think about what issues the Dialogue needed to focus on, and once these were identified, how we could best address them?

Each table brainstormed for 10 minutes and identified their top 3 issues relating to mining and its impacts. These top 3 issues were collated, and the top 4 issues were identified. Tables were randomly assigned two issues and asked what could be done to address the issue, which stakeholders would need to be engaged, and what challenges might be faced in addressing this issue.

Attached (**Attachment a**) is a breakdown of the insights from attendees along the four key themes:

1. Air Quality and health impacts, especially diesel particulate matter
2. Rehabilitation and Land Use Planning
3. Communications and Engagement
4. Economic Diversification and the cyclical nature of industry

b. 2017 Annual Forum - Feedback Survey of Attendees

General feedback from attendees at the Upper Hunter Mining Dialogue's 2017 Annual Forum was positive. As per previous years, a survey invite was distributed to all registered attendees to complete. A total of 15 responses was received in 2017. This feedback has been attached (**Attachment b**) for reference.

While the number of respondents is down on previous years, this reflects the fewer registered attendees in 2017. Those that responded provided a range of suggestions and constructive feedback to help plan a better event in 2018.

Recommendation

- Joint Working Group members review the table discussions and survey feedback to consider how the Dialogue's Forum event can be improved in the future, and how this feedback might inform the Strategic Discussion for 2018 in the next agenda item.

FOR INFORMATION / DISCUSSION

Attachment 7a. Short Summary of Table Discussions from 2017 UHMD Forum



Issue 1	Air quality and health impacts, especially diesel particulate matter
Issue Explained	
<ul style="list-style-type: none"> ● Given that 2017 has been a significantly drier than average year, air quality and the impacts that this can have on the environment and the health of the community in which mining activity exists was a high concern of participants. ● Participants were concerned about the cumulative impacts of air quality on health, especially cluster impacts, and increases in diseases exacerbated by dust such as asthma. ● Diesel particulate matter was a significant concern, with many calls for a study to identify actions and outcomes that can be assessed. ● Participants felt that the communication of air quality could be improved, especially making the community aware of the UHAQMN and how it can benefit community. ● Communication and education was a priority, with an encouragement to publish trends over time where possible. There is an opportunity to not just provide information, but to interpret the data so it educates and guides stakeholders. 	
Possible Solutions / Actions to achieve objectives	
<ul style="list-style-type: none"> ● A gap analysis of existing studies to assess what difference the Dialogue can make. ● Seek to participate in any existing or proposed studies ● Industry to undertake an inventory of existing larger diesel engines on mine sites and railway lines - regarding their emission standards ● Promote the outcomes of the above actions. ● Maintain a wood smoke impacts education program ● Develop and implement a community forecast issued by OEH similar to Sydney ● Transitional approach - diesel particulates ● Seek to publish and interpret long term air quality trends ● Ensure industry is transparent in their response to adverse weather conditions, in real time. ● Seek to survey the community to understand specific issues in relation to air quality. ● Educate the community on the regulatory criteria, how they are developed, and what they are designed to protect. ● Conduct a study into air quality impacts arising from all sources of PM 2.5. ● Conduct a study into ethanol benefits / alternative fuels. ● Utilise temporary rehabilitation options to decrease dust. ● Ensure industry best practice continues to be observed (i.e. on windy days reduce amount of explosive activities in mines, and water down surfaces to reduce dust). 	
Stakeholders to engage with to drive solutions	
<ul style="list-style-type: none"> ● University and other academia - seek advice and help from University of Newcastle to review existing studies, advise of gaps and develop study to assess diesel emission performance against world standards (Newcastle Uni - Centre for Environmental Health and Tom Farrell Institute are likely candidates) ● Original Equipment Manufacturers - OEM's for diesel machines need to be engaged. ● Community stakeholders, especially those in towns close to mines. ● Local government/councils - Singleton, Muswellbrook, Upper Hunter ● State government departments and regulators such as OEH, EPA, and DPI ● Specialists in air quality ● UHMD industry reps ● Business chambers ● NSW Minerals Council 	

Key challenges or barriers to success
<ul style="list-style-type: none"> ● Accessing timely and relevant information from studies. ● Alternative researchers than the University of Newcastle, if not available. ● Applying the outcomes of any studies to improve emissions. ● A reluctance from regulators and industry to invest or change. ● Research initiatives regarding dust suppression, air modelling ● Diesel subsidy. ● Changing the default perception of industry that it's all okay. ● Ensuring an adequate cross section of community participation in survey. ● Time and resources - human and financial - Studies will not be cost effective.

Issue 2	Rehabilitation and land use planning
Issue Explained	
<ul style="list-style-type: none"> ● Participants noted that while in the past 12 months there has been considerable progress towards thinking about future land use planning, there is still much work to be done. ● Participants reiterated the need to capture best practice rehabilitation methods from industry, and the need to communicate rehabilitation activities more effectively. ● There is ongoing research into rehabilitation, which will continue to set high standards for industry to aspire to achieve. ● Participants noted the importance of quality and sustainability in the post-mining landscape and having a long-term view as mining sits within the greater ecosystem. ● Participants noted that the need to consider opportunities rather than liabilities in the management of final voids. ● With regards to future land use planning, participants encouraged incorporating greater use of scenario planning and parallel economics (ties in closely with economic diversification). ● Need to build better communication and awareness of the quantity, quality and pace of rehabilitation by Dialogue industry members. 	
Possible Solutions / Actions to achieve objectives	
<ul style="list-style-type: none"> ● The ultimate aim for the community is to have some form of final land use post-mining. ● Consider what opportunities and parameters exist within the Upper Hunter - What can we do? We are playing with long timeframes and unfavourable regulatory constraints. ● Build education on potential land uses post-mining. ● Liaise with regulators to Natural vegetation v. meeting needs of regional growth (food bowl, energy, recreation). ● Consider alternative uses for voids in the context of the region - Newcastle water supply desalination; hydro generation; recreation. ● Work with DRG on their rehab improvement project - the benefits of having a regional view of final landform, land use, voids, rehabilitation vs. disturbance mapping would be useful. ● Progress with renewing Synoptic Plan and implementation of a more dynamic and flexible strategy to direct and guide strategic future post-mine land use - seek to incorporate regional planning incentives for mining companies to investigate alternative land uses. ● Continue progressive rehabilitation across the industry. 	
Stakeholders to engage with to drive solutions	
<ul style="list-style-type: none"> ● UHMD to continue driving the Upper Hunter community participation in the Synoptic Plan review process. 	

- Regulators and government departments - including strategic planners in the mix
- Establishing a Think Tank of Industry, Regulators, Community / UHMD and Innovators, such as the University of Newcastle, to have a collective approach to this and not work in silos.
- Industry to include more diversity of roles from missing companies (i.e. more business development roles rather than environment and community roles)
- Community to advise on their long-term vision,
- NGO's
- Academics - global, national and local to ensure that we have a wide scope of knowledge regarding rehabilitation, voids and closure practices.

Key challenges or barriers to success

- All plans are long term.
- Land uses are constrained during operations and existing approvals encourage limited range of final land uses (i.e. paddocks and bush).
- Communication between regulators and industry.
- Other competing interests.
- Getting 'buy-in' from industry.

Issue 3

Communications and engagement

Issue Explained

- There's been a drop off in community attendance and involvement in the Dialogue - what are the reasons for this?
- There is a lack of communication with industry employees regarding the Dialogue - they have the potential to become powerful advocates for the UHMD, given they often live and work within the community.
- More engagement between sites, schools and broader community to build open and transparent discussions.
- Overcoming the perception of mining as a negative and promoting coexistence.
- How is the Dialogue relevant to our communities, and how can the initiative be enduring and connected with the community long-term?

Possible Solutions / Actions to achieve objectives

- Communicate all UHMD achievements and what has resulted since it was established, including what has worked well and where improvements can be made.
- Community engagement in relation to planning - Provide UHMD support to facilitate in order to improve future outcomes. Community input to government planning in accordance with recent Environmental Planning Assessment Act amendments.
- Increase engagement with employees and contractors within industry that have a low awareness of the Dialogue.
- Prepare high quality factual information which is digestible, accessible and tailored to varying audiences.
- Use social media more effectively.
- Review all community organisations across the Upper Hunter and prepare a letter and offer to meet with targeted absent community organisations to provide a briefing on the Dialogue (i.e. Upper Hunter Sustainable Farming group)
- Ensure that all stakeholder ideas are respected and acknowledged.
- Continue school mine tours and encourage different teachers to attend each tour to ensure a wide breadth of information across the schools.
- Greater utilisation of mine open days to improve visibility and accessibility to mine sites for community members.
- Advertise projects and activities through local media channels (i.e. Radio, TV, and papers)
- Continue attending local events to interact with people who are not likely to attend UHMD

<p>activities.</p> <ul style="list-style-type: none"> ● Use other educational programs where relevant and appropriate to support our School Mine Tours, e.g. ME program run by Regional Development Association.
<p>Stakeholders to engage with to drive solutions</p>
<ul style="list-style-type: none"> ● Community organisations. ● Industry. ● NSWMC Communications Group and Executive Committee. ● Local government/councils ● University of Newcastle (Tom Farrell Institute) ● Mining League Comp org
<p>Key challenges or barriers to success</p>
<ul style="list-style-type: none"> ● Resources - both financial and human ● Timing - Need to ensure events are timed such that key community members (e.g. small business owners) can participate. ● Overcoming a general lack of interest in the Dialogue - some former members may have had specific concerns.

Issue 4	Economic diversification and the cyclical nature of industry
Issue Explained	
<ul style="list-style-type: none"> ● The Upper Hunter needs greater economic diversification to build capacity for a sustainable and resilient regional economy in the event of an industry downturn. ● Industry and community needs to work together to keep opportunities relevant and enduring over time. ● Concern about employment during cycles and post-mining. ● What is the future for mining in Hunter Valley, and what will the Hunter Valley of the future look like? ● What are the barriers to economic diversification and how do we remove these barriers? ● How do we encourage innovative post-mining land uses to contribute to economic diversification? 	
Possible Solutions / Actions to achieve objectives	
<ul style="list-style-type: none"> ● Engage in discussions with service industries - seek to remove red tape and review options. ● Encourage fast-tracked reuse of formerly mined land, as well as greater use of buffer land with adequate protections in place for the community and industry. ● Government and industry to consider capacity building support for SMEs. ● Leverage off existing infrastructure - What do we have currently? How can it be used productively in a different way? ● Encourage greater investment. ● Understanding the vision and key drivers. ● Consider use of rehabilitated land for growing fuel for alternate fuels. ● Capitalise on opportunities for tourism expansion (e.g. Eden Project). ● Effective use of VPAs ● Need short, medium and long-term solutions - these have not been identified as part of this discussion. ● More effective government policy to support diversification - e.g. have mine employees trained in other skills so during a downturn they can move into other industries. 	

- Undertake research to identify future options - Agriculture, Renewables, Technology
- Supporting people who lose their jobs in a downturn

Stakeholders to engage with to drive solutions

- Whole of government, industry and community approach.
- Business chambers, including small business owners.
- Regional Development Australia.
- Government - State and Local - resources for training.
- Young people - seek to uncover creative ideas for the future.
- Industry groups.
- Business leaders - local, national and international.

Key challenges or barriers to success

- Funding - which stakeholders are willing to invest in retraining employees while they're employed by the mines?
- Clarity of process and the government's land use framework
- Timeliness of the plan to approach it
- Work / Effort / Time - very long term
- Governance arrangements - who is responsible, how do we do this, what, where, when?
- Ensuring a long-term view and sticking with a vision, but also ensuring adequate flexibility.
- Political will and backing
- Mining is a market driven commodity - some factors are outside the Dialogue's influence.
- Communication

Other key issues identified:

- Acknowledgement from several participants that the top 3 issues remain as Rehab, Air Quality and Water Quality.
- Some participants queried what the target was of the Dialogue, and how stakeholders can use the Dialogue to better leverage future projects.
- Water Quality was raised by several participants, particularly in relation to the health of the catchment, salinity and pollution.
- Noise pollution and the impact on neighbouring residents was noted as a concern, as was the impacts of erosion and compaction of soil by machinery on the environment.
- The heritage value of the Upper Hunter and the sense of place that it instils in the local community was a concern noted by participants.

**UHMD Joint Working Group - Water and Land Management
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Agenda Item 8

2018 STRATEGIC DISCUSSION

Issue

A substantive amount of feedback has been received from a variety of stakeholders at the 2017 Forum regarding the future priorities of the Dialogue. This provides a timely opportunity for the Industry Working Group to think strategically about the direction of the Dialogue as we head into 2018.

Background

The Dialogue currently has a number of projects already underway, as outlined below:

- Synoptic Plan Review process - keep the plan focused and on track to deliver a refreshed plan.
- Continuing existing annual projects (i.e. Water Accounting Framework, Rehabilitation Reporting and Principles).
- Implementation of the School Mine Tours Program - full rollout of 2018 schedule.
- Completing the UNSW VR Coal Awareness Project - commenced in December 2017.
- Finalising the updates to Mine Dust and You Fact Sheet and developing an Upper Hunter Air Quality Fact Sheet - initial draft prepared for JWG in September 2017. Feedback received to help redraft and make more engaging to readers.
- Updating Communications plan - 2015/16 Communications plan is out of date. An updated Communications plan has been included for review in agenda item 10.
- Commence new ACARP study into past and present rehabilitation to grazing land.
- Promotion of recently completed projects and results:
 - Hunter River Water Quality Study results
 - Clearing the Air video
 - Beneficial use of voids fact sheets
 - Upper Hunter Grazing Trials - promote the findings of the ACARP study

Recent Joint Advisory Steering Committee and Industry Steering Committee meetings have discussed the Forum outcomes and have considered the direction the Dialogue should take in 2018.

Key outcomes from the JASC meeting are outline below:

- Members agreed that it would be beneficial for the Dialogue to reflect on what has been achieved to date and current issues that are emerging and to prepare a mission statement articulating the goals, targets, and objectives of the Dialogue. Given that environmental features were a strong focus of the concerns when the Dialogue was originally established, there has been a gradual shift towards economic diversification and post-mining land use, and we need to ensure the Dialogue's mission statements supports what are the current concerns.
- Members supported the development of a targeted stakeholder engagement plan that identifies various community and interest groups and establishes a timeframe for engagement. Further awareness of the Dialogue from within industry was also highlighted as a priority.
- Members supported further integration and linking of Dialogue and company information and encouraged the Dialogue to use social media and visitor centres to provide information and build awareness of our key projects.
- The Chair encouraged strong attendance of UHMD participants at the next Synoptic Plan Working Group meeting to ensure this process remains on track.
- The Chair encouraged the UHMD secretariat to work closely with industry members to facilitate a smooth collection process of the data for annual water and rehabilitation reporting projects to ensure that information is provided in a timely manner.

ISC members supported the points raised in the JASC meeting, noting in particular:

- There have been a number of great projects undertaken by the Dialogue over successive years. As the UHMD secretariat have successfully developed and implemented activities under the Dialogue's communications plan, members supported the continued focus on promoting these project outcomes via various information and education materials to community members as a key priority for 2018.

- Other business and community organisations in the region have enjoyed success hosting targeted events to secure community attendance, e.g. a business chamber event focused on how businesses can tap into future land use and economic diversification was successful, as community members had a vested interest in the content.

Recommendation:

- Joint Working Group members are encouraged to consider the outcomes of the 2017 Forum and other projects already underway, as well as the recommended actions from the JASC and ISC meetings and advise whether the activities identified will help the Dialogue achieve its objectives, or any additional activities may need to be considered.

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Agenda Item 9

SYNOPTIC PLAN REVIEW UPDATE

Issue

The process to review the Synoptic Plan continues following sustained advocacy from the Upper Hunter Mining Dialogue and the community to ensure that a future integrated land use plan remains a priority for the Upper Hunter region.

Background

The Synoptic Plan review made considerable progress in 2017, following the 2016 Annual Dialogue Forum commitment from the NSW Department of Planning to review the long overdue document. A workshop was successfully held in June 2017 with a variety of stakeholders. Following the workshop, two working groups were established to drive this process and determine the next steps. The UHMD secretariat is involved with both the core working group and the wider stakeholder advisory group.

At the 2017 Forum, Steve Wills, Director - Hunter, of the Department of Premier & Cabinet presented an update on the progress made in the review process so far and facilitated a feedback session to discuss the workshop outcomes and alignment with other projects or programs and identify delivery timeframes.

The next steps identified included:

- Endorse alignment of objectives with programs at local Council and State level.
- Commence projects to achieve/deliver agreed objectives.
- Develop and communicate project governance structure, including timeframes and milestones.
- Undertake a data inventory of what exists, what is underway, what is needed
- Ongoing stakeholder engagement and communication reporting on progress
- Identify future projects and opportunities to achieve/deliver agreed objectives - ongoing.

At the October 2017 Joint Working Group meeting, members discussed the progress of the Plan and suggested that these concerns might best be raised with DPC via a written statement. Please see **attachment 9a**. on the following page to review the draft statement document.

The next meeting of the Working Group is yet to be advised, however, the UHMD secretariat will strongly encourage the Dialogue's community participants involvement in the meeting to ensure it is well represented by a range of stakeholders.

Related projects:

Upper Hunter Economic Diversification Project

Limited progress has been made in relation to this project. The DPC officer leading this project has since moved into another position and there is no indication for when the next stakeholder meeting will be. The UHMD secretariat will remain engaged with DPC on this project and advise of any developments

Recommendation:

- Joint Working Group members review the attached statement regarding concerns with the Synoptic Plan review process and provide advice on whether this appropriately captures all the relevant concerns of the Dialogue.

FOR INFORMATION / DISCUSSION

**UHMD Joint Working Group - Water and Land Management
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Agenda Item 10

UPDATE ON COMMUNICATIONS ACTIVITIES

Issue

The Upper Hunter Mining Dialogue continued to focus on implementing its communication strategy in 2017.

Background

The focus on communications strategies continued through the busy final quarter of 2017 and will continue in 2018 including attending community engagement events and engaging with the media. Key activities since the previous Industry Working Group meeting includes:

Media / communication plans:

- The “Clearing the Air” video (formerly referred to as the “What Happens at a Mine on a Dusty Day video) has been filmed and recently finalised. Members will be shown the video at the meeting. A filming date for the Virtual Reality video, which is an offshoot of the School Mine Tours Program is being finalised.
- The Dialogue will be on display at the Hunter Coal Festival (April 6-15) including a presentation at the Mining Leaders Lunch on April 6 and an expanded display at the Singleton Community Day on the Singleton Community Day on April 7. The Lunch presentation will be aimed at informing industry representatives about the activities of the Dialogue while the Community Day display will focus on engagement with the general community; the Dialogue is also facilitating a display with industry members focusing on rehabilitation aimed at overcoming the community's knowledge gap of rehabilitation of mined land.
- Following months of liaison by the Dialogue with mine sites and schools, the inaugural School Mine Tours Program was successfully rolled out in the final quarter of 2017 with tours beginning in earnest in October. Nine School Mine Tours were completed for the high school portion of the program and saw 250 students from Singleton High School, Muswellbrook High School, St Catherine's Catholic College and St Joseph's High School visit Mt Arthur, Bengalla, Rix's Creek and Hunter Valley Operations mine sites. All sites did an outstanding job hosting the tours and the program drew very positive comments from students, teachers and the mines themselves. Scheduling for the 29 tours across 13 sites in 2018 has started with the aim of starting in late April. The syllabus-related in school teaching material has been successfully trialled at Singleton High School and will now be peer-reviewed by teachers.
- The Dialogue met with Singleton Shire Council councillors and managers in September; which led to an invitation for the Dialogue to present to a November 16 meeting of the Association of Mining Related Councils. Both presentations were well received.

Recent Media:

- The school mine tours in particular generated very positive coverage in Upper Hunter Fairfax publications and @the Coalface magazine. In particular, the Fairfax titles published coverage on every tour including multiple photos either in their newspapers or on their websites. The articles and photos were also shared with schools for use in their newsletters.
- The Annual Forum generated positive media both before and after the event in the Singleton Argus and @the Coalface. The Dialogue also gained positive promotion from the live broadcast by Radio 2NM at the Annual Forum.
- An article on the filming of the “Clearing the Air” video also appeared in local newspapers.
- The Dialogue is currently trialling branding advertising with Radio 2NM. The 30-second ads are designed to increase knowledge of the UHMD across the Upper Hunter and will continue through to the end of May.

Community Engagement:

To round off its 2017 community engagement activities, the Dialogue attended the Broke Village Fair on September 10, Singleton Show on September 22-23 and the Muswellbrook Christmas Spectacular on December 9. The events generated 44 surveys through interactions with 86 people. During the year community engagement activities generated 171 surveys and 348 interactions. So far in 2018, the Dialogue has attended with its display the BHP Family Day on March 10, generating 9 surveys from 20 interactions and the Upper Hunter Show on March 16-17, collecting 9 surveys from 15 interactions.

Upcoming community events include:

- Hunter Coal Festival April 6-15, 2018
- Tocal Field Days May 4-6, 2018

UHMD Community Survey Results:

Attached (**Attachment a**) for reference following this update is a summary of the key UHMD community survey results. Over 355 responses have been gathered over 2016 and 2017, and the survey will continue to be undertaken at upcoming events.

UHMD Communications Plan 2018:

Attached (**Attachment b**) for reference is an updated Dialogue communications plan. The previous communications plan was developed for 2015-16, so this is a timely chance to review what is and what is not working and seek to update the plan to incorporate social media and other emerging communications initiatives into the Dialogue's activities.

Recommendation:

- Joint Working Group members note the Dialogue's various communications activities and priorities for 2018.

FOR INFORMATION / DISCUSSION

Attachment 10a. UHMD Community Survey Results



Key findings:

- The majority of respondents identified jobs and employment as the main benefit of mining in the Upper Hunter. Residents also associated the money and income generated from mining with boosting the economy and growth across the region.
- Respondents felt the best way to increase engagement with the community was to get out amongst the community and actively communicate with residents. Respondents also felt that providing relevant information and education materials would help improve engagement, as well as the industry being seen to be rehabilitating disturbed land.
- 62% of respondents believe that the mining industry co-exists with the community.
- 72% of respondents believe the Dialogue's priority should be rehabilitation strategies. Other key priorities identified include addressing water and air quality issues and further investigation of voids.
- More than half of the respondents believed that voids could be put to beneficial use, with recreational lakes, water storage, and pumped hydro the main suggestions for use.
- About 3 in 10 people were aware of the Dialogue before completing the survey. This does not factor in the discussions between UHMD and the community at the community events where members do not complete a survey but may be aware of the Dialogue.
- Less than 10% of respondents have accessed the UHMD website.

Demographic information:

- **Survey period:** 2016-2017
- **Total respondents:** 355 (51.3% in 2016, 28.7% in 2017)
- **Gender:** Males: 59.7%; Females: 39.2%; Rather not say: 1.1%
- **Age:** Persons under the age of 40: 30.4%; Persons aged 40 to 59: 31.0%, Persons aged 60 or older: 37.8%.
- **Primary Location:** Upper Hunter residents: 31.3%; Other Hunter Valley residents (primarily Lower Hunter/Newcastle): 45.1%; Rest of NSW (primarily Sydney or Central Coast): 23.1%.
- **Main survey collection events:** Total Field Days: 65.1% over 2016 and 2017; Singleton Shows, Upper Hunter Show and HSEC Conference also rated highly.
- **Relationship to the Upper Hunter:** Live/Work in Upper Hunter: 41%; Do not live/work in Upper Hunter: 41%; Live only: 12%; Work only: 6%.

How does mining benefit the Upper Hunter? (322 respondents)

This was an open response question. Clear themes were apparent from a number of responses, which enabled the responses to be grouped into the key themes as outlined in the table below. Many responses contained multiple themes.

The clear benefit from mining identified by respondents was through the creation of jobs and employment in the region, with close to 74% of responses referencing this as a benefit. The next two themes identified are closely linked, with money & income, and the growth of the economy reported by 24% and 20% of respondents respectively. Other major benefits identified included community support through sponsorship and grants, as well as the provision of community services such as hospitals, schools and transport to name a few.

	Theme	Count	% of respondents
1	Jobs & Employment	238	73.9%
2	Money & Income (incl. Exports)	78	24.2%
3	Boost Economy and Growth	63	19.6%
4	Sponsorship & Grants	39	12.1%

5	Community services	31	9.6%
6	Energy & Resources	22	6.8%
7	Infrastructure provision	19	5.9%
8	Quality of Life and Certainty	13	4.0%
9	Rehabilitation and Land Use	13	4.0%
10	Training and Research	6	1.9%

Notes:

- Both males and females recognised the importance of jobs and employment derived from mining. Females were more likely to report the benefits of mining as boosting the economy, providing sponsorship and grants, and providing energy and resources than their male counterparts. Males are more likely to recognise the money and income, community services and provision of infrastructure.
- All age groups recognised the importance of jobs and employment. However, those under 40 were more likely to report benefits for the local economy and growth, as well a rehabilitation and land use relative to the older groups. Those 60 and over were more likely to report infrastructure provision as a benefit of mining than other groups.
- Similarly, all locations reported jobs and employment as recognised as the key benefit. Upper Hunter respondents reported sponsorship and grants as a key benefit, while those outside the Hunter indicated that infrastructure provision, rehabilitation and energy and resources were key benefits of mining.

How can the mining industry improve engagement? (292 respondents)

As with the previous question, this was open response. Responses were grouped into readily identifiable themes where possible. Responses could contain multiple themes. The most common responses given were to actively talk, communicate and discuss issues with the community to improve engagement (21%). The next most popular responses were to provide information and data to the community to help educate (17%), as well as advertising and publicising what work is being done. Respondents further suggested that rehabilitating the land and managing environmental impacts such as dust, noise and visual amenity would improve engagement. A high number of respondents also suggested the industry act honestly and transparently by attending community events and field days. Close to 9% of respondents indicated that the industry was already interacting well with the local communities.

Rank	Theme	Count	% of respondents
1	Actively communicate and engage	62	21.2%
2	Provide information and educate	50	17.1%
3	Rehabilitate land	47	16.1%
=4	Be honest and act transparently	38	13.0%
=4	Attend community events & shows	38	13.0%
6	Manage environmental impacts	36	12.3%
7	Advertise & promote activities	31	10.6%
8	Support through sponsorship and services	30	10.3%

9	Already interacting well	25	8.6%
10	Collaboration and innovation	22	7.5%
11	Employ locals	16	5.5%
12	Open Days and Mine Tourism	16	5.5%
13	School visits	10	3.4%

Note:

- The top suggestion for improving community from females was to rehabilitate land, whereas actively communicating and talking with the community was the most common theme identified by male respondents, with both genders also recognising the importance of providing information. Females were more likely to identify the management of environmental impacts as a key challenge to engagement, while males were more likely to suggest that industry act honestly and transparently than females did.
- All age groups strongly believed in actively communicating and discussing issues directly with the community would improve engagement. Respondents aged under 40 reported that community events and field days would provide the best opportunity for engagement, while those aged between 40 and 60 believed sharing information to educate the community would provide the best results.
- Those in the Upper Hunter were more likely to report the rehabilitation of land as the best opportunity to improve engagement with the community. Upper Hunter residents also reported acting transparently and supporting the community through sponsorship as more effective than the other age groups did. Those outside the Upper Hunter reflected the main results.

Do you believe that mining positively co-exists with its community in the Upper Hunter? If not, is there anything that the mining industry could do to work towards coexistence? (327 responses)

Over 62% of respondents indicated they believed the mining industry coexists with the local community. Just 6% of respondents expressly indicated no, or a negative response. Over 17% of comments were either comments, or suggestions to improve co-existence. 8% of respondents indicated mixed belief of coexistence.

Response	Count	Percent	Sample comments
Positive	203	62.1%	<i>Yes, I believe mining co-exists with community by offering employment to local towns and rehab after mine is finished.</i>
Mixed	27	8.3%	<i>Yes and no. Improve attitude towards entitlement of use of natural resources</i>
Negative	21	6.4%	<i>No. It needs to realise that it is not the be all and end all and that it is only here for a short term.</i>
Comment / Suggestion only	57	17.4%	<i>More face to face collaboration with the community to enable them to find out information first hand</i>
Unsure	19	5.8%	<i>Unsure - Not familiar enough with this particular area.</i>

Notes:

- The amount of support for positively coexisting was generally consistent around the early to mid-60% to 65% mark for most major shows where a significant number of surveys were collected (i.e. over 25 or more). The lowest figure of support comes from Tocal Field Days in 2017 where only 48% of respondents reported they believed mining positively coexists with the community.
- The support for coexistence is not limited to gender, with roughly the same amount of female

- respondents believing the industry positively coexists
- Respondents under 40 generally had a more positive view of coexistence with 71% of respondents indicating they believed mining coexisted positively with local communities. The 40 to 59 age bracket mirrored the total results, and while the majority of those 60 believed mining positively coexists, they were less positive with only 53% of respondents indicating a positive response.
- Those respondents who indicated they were from the Upper Hunter were more likely to respond that mining positively coexists with the local community than those residing outside the region, with close to two thirds of responses.

What priorities should the Dialogue focus on? (164 responses)

Members were given six priority areas and could select multiple choices as priorities, as well as add their own options. Rehabilitation strategies is the key priority the Dialogue should be focusing on, as reported by 72% of respondents. The other main priorities identified were addressing water quality issues (55%), air quality issues (48%) and voids (45%).

Rank	Priority	Count	Percent
1	Rehabilitation strategies	118	72.0%
2	Water Quality issues	90	54.9%
3	Air quality issues	79	48.2%
4	Development of voids	73	44.5%
5	Research	47	28.7%
6	Noise reduction	30	18.3%

Notes:

- Females were more likely to list air quality and rehabilitation strategies as priority issues than males were. Males reported priority issues of voids, noise reduction and research at a higher percentage than females.
- 80% of Upper Hunter respondents believed the Dialogue should focus on Rehabilitation strategies. Further 65% of respondents believed that air quality was a priority.
- Those aged over 40 were more likely to see water quality issues as a priority than those aged under 40. However, respondents under 40 reported less priority issues (2.3 per respondent) rather than those aged 40 to 59 (2.8 issues) and over 60 (2.9 issues)

Do you believe final voids can be put to beneficial use? If so, how? (147 respondents)

Just over half responses were simple yes/no responses, with a lot more open response style answers allowing respondents to provide their thoughts or comments on voids and how they may be used. Over half of respondents believed that mine voids could be put to a beneficial use once mining ceases. Only 6% of respondents responded negatively. 12% of respondents were unsure and would require more information. 28% of respondents answered with suggestions for various beneficial end uses for voids, indicating that some of these respondents do in fact believe voids can be put to beneficial use.

Response	Count	Percent
Yes	75	51.02%
Mixed	3	2.04%

No	9	6.12%
Unsure	18	12.24%
Suggestion	42	28.57%

Notes:

- Males were more likely to answer positively than females with 54% of males believing that voids could be used beneficially compared to 44% of women.
- There was a slight variation between the different age groups, with those aged 40 to 59, with the highest percentage of positive answers at 53%. Around 52% of respondents over 60 answered positively, with close to 48% of those under 40 believing voids could be used beneficially.
- In terms of location, respondents from the Upper Hunter returned the fewest yes responses with 39%. However, 44% of responses from Upper Hunter respondents were suggestions (a far higher rate than the other locations), which could suggest these respondents have thought more about voids and offered more complex responses than a simple yes/no response. Two thirds of Other Hunter residents answered positively, with around 48% of the rest of NSW respondents answering positively.

Before today, were you aware of the Upper Hunter Mining Dialogue? If so how did you hear about the Upper Hunter Mining Dialogue? (337 responses)

Just under a third of respondents are aware of the Upper Hunter Mining Dialogue prior to completing their survey. The figure varies from event to event but has remained consistent at around the 30% mark since the community surveys began in 2016. There have been an increasing number of 'Unsure' responses in 2017, which may suggest that people may be aware of the Dialogue in some capacity, although not strongly enough to answer firmly as 'Yes'.

Response	Count	Percent
Yes	106	31.5%
No	220	65.3%
Unsure	11	3.3%

Level of Dialogue awareness by show	Percent
Total Field Days 2016 (n=149)	29.5%
Singleton Show 2016 (n=22)	36.4%
Upper Hunter Show 2017 (n=20)	25.0%
Tom Farrell Institute Conference 2017 (n=11)	63.6%
Cessnock Show 2017 (n=4)	25.0%
Total Field Days 2017 (n=66)	22.7%
HSEC Conference 2017 (n=21)	38.1%
Broke Village Fair 2017 (n=8)	25.0%

Singleton Show 2017 (n=30)	50.0%
Muswellbrook Christmas Spectacular (n=6)	16.7%

Notes:

- 31% of both males and females were aware of the Dialogue before the time of their survey.
- Older respondents were more likely to have been aware of the Dialogue prior to completing their survey. 35% of respondents aged over 60 were aware of the Dialogue compared to 33% of the 40 to 59 age bracket, and just 27% of those aged under 40.
- Almost 45% of Upper Hunter residents surveyed were aware of the Dialogue before completing their survey. Respondents outside the Upper Hunter had similar rates of awareness with just one in four Other Hunter respondents and the rest of NSW respondents indicating they were aware of the Dialogue.

Have you ever accessed the Upper Hunter Mining Dialogue website for information? (163 respondents)

This question was introduced in 2017. Less than one in ten people surveyed had accessed the Dialogue website. Those under 40 years of age were more likely to access the Dialogue website, with 11%. One in every six Upper Hunter resident surveyed had accessed the Dialogue website. Shows with the highest number of positive responses included the Tom Farrell Institute Conference, Singleton Show and the Upper Hunter Show.

Response	Count	Percent
Yes	14	8.6%
No	145	89.0%
Unsure	4	2.5%

Attachment 10b. Communications Plan 2018



Upper Hunter Mining Dialogue Communications Plan 2018

Background

An in-depth Communications Plan was developed in 2015/2016 and its implementation has delivered some major success including a growing knowledge/recognition of the Upper Hunter Mining Dialogue and its activities within the general community. The Dialogue's research through surveys conducted at community engagement events indicates about 30% of people surveyed are aware of the UHMD. While this is an improvement from the Dialogue's research starting point in 2015, an obvious gap in the community's knowledge remains. Likewise, the Dialogue's research has identified a similar issue within the mining industry itself. This refresh of the communications plan aims to expand activities designed to increase the knowledge of the UHMD in both the community and mining industry sectors. This communications plan is designed to operate over 2018/19 and will be reviewed quarterly to ensure key outcomes are being achieved.

Your feedback on the draft Communications Plan is welcomed.

Events

During the past two years, the Dialogue has been on display at local community events and shows. The attendance at events has allowed The Dialogue to successfully engage directly with members of the community and has become a key segment of the overall communications plan. The Dialogue's 2018 events schedule includes:

- Upper Hunter Show – March 16&17
- Hunter Coal Festival – April 7
- Tocal Field Days – May 4-6
- NSWMC Conference – August 6&7
- Broke Village Fair – September 9
- Singleton Show – September 21-23
- Muswellbrook Christmas Spectacular - December (Date TBC)

The Dialogue display consists of educational posters and handouts explaining the activities of the UHMD and highlighting current projects. Collateral is regularly updated to ensure all information is as current as possible. The Dialogue's communications team also conducts surveys at the events and actively interacts with community members. In 2017, the Dialogue interacted with 348 people and collected 171 surveys at local events. Our 2017 surveys reveal the biggest issue of concern for community members is rehabilitation – people do not understand it and how it is regulated, and many don't believe it happens. To counter this, the Dialogue with assistance from rehabilitation experts from industry partners, will expand its display at the Hunter Coal Festival to include an interactive section designed to educate people on **rehabilitation**.

Community Engagement and Involvement

Local groups will be further targeted for briefings by the Dialogue. The Dialogue has developed good relationships with local groups and will expand its reach through guest speakers/presentations to local organisations through the development of an engagement plan which identifies key stakeholders to brief them on the Dialogue and seek genuine involvement. Groups to be targeted may include:

- Hunter Thoroughbred Breeders Association
- Rotary and Lions Clubs
- Hunter Environment Lobby
- Chambers of Commerce
- Community Consultative Committees (CCC's)
- Hunter Valley Wine & Tourism Alliance
- School P&C meetings

School Mines Tour Program

The first instalment of the School Mines Tour Program was rolled out in the final quarter of 2017 with about 250 Year 9 students visiting four mine sites over nine separate tours to Rix's Creek, Bengalla, Hunter Valley Operations and Mt Arthur. A full year of tours will see an estimated 1000 Year 5 and Year 9 students from 19 schools across the Singleton/Muswellbrook LGAs tour 13 different mine sites representing all Dialogue industry partners. Participating mines and schools are:

- Mangoola/Denman Primary and St Joseph's Primary Denman
- Muswellbrook Coal/Muswellbrook Christian School
- Ravensworth/St James Primary and Aberdeen Public
- Liddell/South Muswellbrook Primary
- Glendell/Australian Christian School Singleton and Mt Pleasant Primary
- Hunter Valley Operations/St Catherine's High School
- Mt Owen/King Street Primary
- Rix's Creek/Singleton High School
- Bulga/Singleton Public Primary
- Mount Thorley Warkworth/Singleton Heights Primary
- Wambo/Broke, Milbrodale, Jerry's Plains and Kirkton public schools (combined)
- Mt Arthur/Muswellbrook High School
- Bengalla/St Joseph's High School

The Dialogue is responsible for arranging the schedule for the School Mines Tours after liaising with the mines and schools to ensure suitable dates and organising the buses. Based on school/class sizes, most mines will host two tours in the year ahead, however, Bengalla, Mt Arthur and will host three tours and Rix's Creek has agreed to four tours due to these sites hosting the larger high school classes. The tours educate students and teachers on all aspects of coal mining and detail both the benefits and impacts of mining. Employees of the mining companies act as the tour guides after training by the Dialogue to ensure consistency of messaging across all sites. Messaging and "how to" packages for the mines and the schools have been developed by a working group consisting of industry, education, community and local government representatives. In class teaching material to suit the Year 9 geography syllabus has also been developed and trialled. It is planned to introduce this into the curriculum in 2018. It is also planned to develop material to suit the primary school syllabus.

Production of a virtual reality video is also planned as part of the School Mines Tour Program. The Dialogue is partnering with the University of NSW to produce the video which will allow students to "tour" a mine site via 3D video. The VR video will also be used as part of the events community engagement display where practicable.

Industry Engagement

As well as educating the general community about the Dialogue, it is imperative mining industry employees are also aware of our activities. It is proposed a quarterly newsletter will be developed and shared electronically with all Dialogue partners/participants for distribution through their websites/social media platforms. Posters detailing the Dialogue's activities will also be distributed to industry partner sites for display in cribs and meeting rooms. The Dialogue will also be the subject of a presentation at the Mining Leaders Lunch on April 6, as part of the Hunter Coal Festival. In front of a largely industry-based audience, the presentation will detail the Dialogue's aims, background and strategies and be followed by short live interviews with Dialogue community and industry members who will explain the benefits of the Dialogue from the community and industry perspectives.

Media

- **Newspapers** - News articles and photographs are distributed to local newspapers monthly or as needed. Outlets include Hunter Fairfax publications and industry magazine @thecoalface – all of which willingly accept the provided media releases and generally give good coverage including inclusion on the Fairfax websites. Relationships with journalists/editors are maintained.
- **Radio** - The Dialogue is trialling a paid advertising program with Radio 2NM. The advertisements give a brief message about the Dialogue and seek to drive listeners to our website. 2NM/Power FM and ABC Radio are also used for on air interviews.
- **Television** - Reporting of Dialogue activities/projects is event and news specific. Opportunities will be pursued as they arise – past TV reports include the 2017 release of the water accounting

framework numbers and a Landline feature on the Grazing Trials.

- **Social media** – the Dialogue will investigate opportunities to promote on the Facebook and Twitter platforms. The most efficient method of doing this would be to push our messaging through partners existing websites and Facebook and Twitter feeds.
- **Video** – the “Clearing the Air” video detailing the Dialogue’s Weather Forecasting Project will be distributed for use on websites and be featured, where possible, at Dialogue presentations and community engagement activities.

Upper Hunter Mining Dialogue Resource Centre

The Resource Centre provides a physical presence and anchor for the Dialogue and hosts its working group and committee meetings. Its meeting facilities and “hot desks” are utilised regularly by industry partners and community groups.

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NSW GOVERNMENT REHABILITATION REFORM PROGRAM UPDATE

Issue

A number of reforms to the NSW Government's rehabilitation framework are currently being considered, with consultation due to commence with key stakeholders shortly. Some of this work will complement a number of the Dialogue's land management projects that have been undertaken since the Dialogue was established.

Background

Please see below for brief updates on a number of aspects of the NSW government's rehabilitation reform program, as well as other relevant government initiatives.

DRG Rehabilitation Reform Program

DRG is close to finalising the reform framework and a number of industry codes that will go out to stakeholders for target consultation shortly. This process has been delayed slightly due to the recent DPE restructure. Industry and other groups will be consulted once the documents are finalised. The consultation process will be identical to that used for the EIA improvement process.

Rehabilitation GIS portal

Work continues to advance the rehabilitation GIS portal that will enable users to visualise mine rehabilitation progress. The data collected from industry will feed into the government's SEED portal. Redacted information will be provided to stakeholders but will be revised to fit with metrics the general public will understand. DRG will be uploading environmental layers with an expected launch date of 1 July 2018 and incorporating a six-month transition period. User testing by industry is expected in the months leading up to the launch.

Government Restructure of DPE, DRG and the Resources Regulator

A restructure of the Department of Planning portfolio has seen the Division of Resources and Geoscience moved to the Resources Regulator. Dr. David Blackmore, formerly of the Environmental Sustainability Unit within DRG, has since been moved to the Titles division within the Resources Regulator, as has the Environmental Sustainability Unit. Matt Newton has now assumed Dr. Blackmore's role within DRG. Kylie Hargreaves has stepped down from the role of Deputy Secretary of DRG, with Michael Wright acting as Deputy Secretary in the interim.

DPE Improving Mine Rehabilitation discussion paper

The Department of Planning and Environment released a discussion paper in December 2017 with a number of proposals looking to strengthen rehabilitation planning in the assessment phase of mining. The proposals in the discussion paper are set out as below.

1. Adopt policy principles to guide the regulation of mine rehabilitation
2. Develop a policy framework for the assessment of final voids
3. Improve consideration of rehabilitation and closure in the early stages of mine planning
4. Ensure rehabilitation requirements are clear and enforceable
5. Ensure that regulatory processes that occur once a mine has been approved are transparent and deliver consistent rehabilitation outcomes.

Submissions were due in mid-February, with a total of approximately 30 submissions from industry, government organisations, and individuals provided to the NSW government, who are currently reviewing submissions before further consultation with key stakeholders. The UHMD secretariat will

provide further updates as this progresses.

Recommendation:

- Joint Working Group members note the significant amount of work currently being undertaken by both industry and the NSW government regarding rehabilitation.

FOR INFORMATION / DISCUSSION

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REHABILITATION REPORTING AND PRINCIPLES PROJECT

Issue

The rehabilitation reporting figures and principles documents have been finalised for 2016.

Background

The 2016 results have been uploaded to the Upper Hunter Mining Dialogue website, in addition to the 2016 reports from Dialogue companies. Joint Working Group members are encouraged to review the updated figures and company reports here: <http://www.nswmining.com.au/dialogue/latest-projects/land-management/rehabilitation-principles-and-commitments>

Members will note there has been an increase in the amount of land newly rehabilitated in 2016 compared to 2015, as well as a reduction in the amount of land newly disturbed in the same period. The annual rehabilitation to disturbance ratio also looks likely to increase from 0.60 to 0.71 from 2015 to 2016. Similarly, the overall proportion of disturbed land rehabilitated looks to have increased in 2016, up 1.5% to 35.4%.

Upper Hunter Mining Dialogue Rehabilitation Reporting Project (2012 to 2016)						
	Rehabilitation	2012 (ha)	2013 (ha)	2014 (ha)	2015 (ha)	2016 (ha)
A	Total land area disturbed and not yet rehabilitated at the beginning of the reporting period	17,830	18,098	18,479	20,171	21,180
B	Total amount of land newly disturbed within the reporting period	1,163	1,148	1,057	1,424	1,270
C	Total amount of land newly rehabilitated[1] within the reporting period (rehabilitation commenced in this period)	895	962	801	856	907
D	Total land area disturbed and not yet rehabilitated at the end of the reporting period (D = A + B - C)	18,098	18,283	18,736	21,008	21,304
E	Total area of rehabilitation at all operations at the end of the reporting period [2]	8,791	9,145	10,023	10,783	11,653
F	Annual rehabilitation to disturbance ratio (C: B) [3]	0.77	0.84	0.76	0.60	0.71
G	Overall proportion of disturbed land rehabilitated (E/(D+E))	32.7%	33.3%	34.9%	33.9%	35.4%
	Other Managed Land					
	Estimate of the total land held as biodiversity offsets	10,973	13,164	22,607	22,773	25,466
	Estimate of the total area of land managed for agricultural use (e.g. grazing, cropping, viticulture)	57,533	60,174	44,252	44,632	40,146

Given the project has now delivered five years of the data, we are starting to see some interesting trends:

- Since the reporting project commenced in 2012, the amount of land held in biodiversity offsets has more than doubled, from just under 11,000 hectares to over 25,000 hectares.
- There is now more land being held as biodiversity offsets than the total land area disturbed and not yet rehabilitated in the Upper Hunter.
- The overall proportion of disturbed land that has been rehabilitated has increased 2.7% from 2012, from 32.7% to 35.4% in 2016.
- The total amount of rehabilitated land has grown from 8,791 ha in 2012 to 11,653 ha in 2016, a growth of thirty three percent and 2,862 hectares.
- The total area of land disturbed but not yet rehabilitated has increased by 3,350 ha between 2012 and 2017 to 21,180 ha.

The UHMD secretariat is working with industry members to resolve a number of identified gaps in relation to the company reports.

Industry members will be contacted shortly requesting the provision of 2017 data. The UHMD secretariat is seeking to leverage off industry's annual reporting commitments and reduce duplication wherever possible to ensure the 2017 data can be collected, analysed and published in a reasonable timeframe.

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UPDATE ON CURRENT LAND MANAGEMENT PROJECTS

Please see below for updates on the current Dialogue land management projects:

Grazing Study and ACARP proposals

The final report for the *Sustainability and Profitability of Grazing on Rehabilitated Mine Land in the Hunter Valley* has been submitted to ACARP for publishing. Neil Griffiths (NSW Department of Primary Industries) reported the key findings at the previous JASC and JWG for Land Management and Water meetings in September and October 2017. The UHMD secretariat will advise Dialogue members once this has been published.

It is understood that the new ACARP funding proposal submitted by Mr. Griffiths titled '*Examination of past and present mine rehabilitation to grazing land as a guide to future research*' has successfully obtained ACARP funding. This project will involve undertaking a desktop collation and review of past and present mine pasture rehabilitation work undertaken in the Hunter Valley coal region, as well as conducting field assessments on a range of selected sites to identify practices which are most successful and likely to support sustainable grazing. This project received broad support and commitments from Dialogue industry partners.

A further 89 research projects were selected in 2017 of interest to the coal industry. The report summarising these - ACARP People and Projects 2017 - will be available shortly. Once released, the UHMD secretariat will review the projects and advise of any other projects relevant to the objectives of the Upper Hunter Mining Dialogue.

Rehabilitation Reporting and Principles

Please see **Agenda item 12** for more information.

Beneficial reuse of voids project

A project to redraft a number of highly technical reports included in the 'Beneficial Reuse of Voids' project has recently been completed. Three documents have been prepared for the UHMD, including a Pit Lake Water Quality Fact Sheet, A Stakeholder Workshop 2016 Fact Sheet, and a Potential Beneficial End Use Review Pamphlet. The UHMD secretariat will seek to incorporate the information provided in these fact sheets in our communications efforts regarding voids in 2018.

Awareness and promotion of rehabilitation in the Hunter Valley / Mine rehabilitation booklet

The UHMD secretariat has re-engaged with DPE finalise the Mine rehabilitation booklet and has liaised with members to seek updated high-resolution photos from the companies featured in the case studies. DPE continues to support the co-branded Mine Rehabilitation Booklet. The booklet is currently in the final stages of the design phase and is expected to be completed shortly. DPE is seeking to have the Minister for Resources and Energy, The Hon Don Harwin launch the booklet and website in the coming month. An updated copy of the mine rehabilitation will be circulated for review at the meeting if possible. Once the booklet has been publicly released, we will provide members with a link to the booklet and website.

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OTHER LAND MANAGEMENT BUSINESS

Please find an update on a number of other items that may be of interest to the Dialogue Joint Working Group members below:

Senate Committee Inquiry into mine rehabilitation

The Senate Committee inquiry into mine rehabilitation recently attended mine rehabilitation tours across the Hunter Valley on 14 March 2018, with the Mangoola (Glencore) and Drayton South (Anglo American) sites comprising the tour locations. The inquiry is expected to conclude with the final report being delivered to parliament the last sitting week of the Autumn session, which is likely to be mid-May 2018.

ICMM Mine Closure Workshop

The ICMM mine closure workshop was held in the Hunter in mid-2017, and one of the key drivers of the workshop was to help ICMM facilitate the updating of their mine closure toolkit. The revised toolkit is yet to be released. The UHMD secretariat will monitor ICMM's progress and advise members once released.

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GENERAL DIALOGUE MATTERS

Membership of the Joint Working Group - Water and Land Management (Contact List as of 4 October 2017)

The UHMD Secretariat is currently updating our contact lists to ensure we have the most accurate and current lists available. If JWG members could please advise of any updates or other organisations we should be targeting, please contact the UHMD secretariat.

Industry

Bill Baxter (Chair)	Yancoal
Chris Knight	The Bloomfield Group
Chris Quinn	The Bloomfield Group
David O'Brien	Glencore
Dominic Brown	Yancoal
Donna McLaughlin	BHP
Genelle Scotts	Bengalla Mining Company
Harry Egan	Peabody Energy
Julie Thomas	Muswellbrook Coal
Merri Bartlett	Peabody Energy
Ngairé Baker	Mach Energy
Nigel Charnock	Glencore
Paul Amidy	Glencore
Peter Jaeger	Peabody Energy
Phillip Brown	Yancoal
Steve Brown	The Bloomfield Group

Community / other organisations

TBC	Hunter Thoroughbred Breeders Association
Alison Crocker	AGL
Arthur Burns	Hunter Valley Water Users' Association
Bev Smiles	Hunter Environment Lobby - Wollar
Bill Collins	The University of Newcastle Australia
Brett Keeping	Upper Hunter Wine Makers Association
Bruce Whitten	Hunter Valley Water Users' Association
Cameron Archer	Tom Farrell Institute
Glenda Briggs	NSW Department of Primary Industries
Greg Woodward	Community Member
Hugh Upward	Hunter Valley Protection Alliance
Ian Napier	Hunter Valley Wine Industry Association
Jan Davis	Hunter Environment Lobby – Maitland
Jim Morgan	Wybong Action Group
Jo Powells	NSW Department of Primary Industries
Jonathan Moore	NSW Farmers Association
Karen Marler	NSW Environment Protection Authority
Ken Bray	Hunter Valley Water Users' Association
Laurie Perry	Wonnarua Nation Aboriginal Corp
Leonie Ball	Singleton Beef and Land Management Association
Matt Parkinson	Bayswater Power Station
Matthew Newton	Division of Resources & Geoscience
Melinda Hale	Singleton Council
Monique Meyer	NSW Trade and Investment
Neil Griffiths	NSW Department of Primary Industries
Neil Nelson	Singleton Beef and Land Management Association
Peter Ainsworth	NSW Department of Trade and Investment
Rebekah Gomez-Fort	NSW Department of Primary Industries
Ron Fenwick	Wambo CCC – Singleton

Sean Constable
Mr Simon Francis
Simon Turpin
Tim Roberts
Tony Cox
Wendy Bowman

Upper Hunter Shire Council – Scone
NSW Department of primary Industries – Water
Local Land Services - Hunter
Tom Farrell Institute, The University of Newcastle
NSW Department of Trade and Investment
NSW Mine Watch

UHMD Secretariat

Bob Mackie
Craig Milton
James Barben

theresource
NSW Minerals Council
NSW Minerals Council

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NEXT MEETING / MEETING CLOSE

The next Joint Working Group meeting dates are as follows:

- Wednesday 27 June 2018
- Wednesday 26 September 2018