



NSW MINERALS COUNCIL
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AGENDA
NSW Minerals Council

UHMD Joint Working Group Meeting - Water

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

Thursday 21 July 2016: 2.00pm - 4.00pm

1. Welcome and apologies
2. Minutes and actions of the previous meeting
3. Water Resources Map project
4. Hunter Bioregional Assessment
5. MCA Water Accounting Framework
6. Hunter River Salinity Trading Scheme Review
7. Voids project
8. Update on UHMD Communications initiatives
9. Working group performance, relevance and strategic direction
10. Other business

DRAFT MINUTES

NSW Minerals Council UHMD – Joint Working Group - Water

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

Wednesday 11 May 2016: 10.00am – 1.00pm

In attendance

David O'Brien (Chair)	Glencore
Chris New	Rio Tinto
Julie Thomas	Muswellbrook Coal
Rebekah Gomez-Fort	NSW Department of Primary Industries
Bob Mackie	<i>theresource</i>
Chris Quinn	The Bloomfield Group
Bruce Devonport	Singleton Council
Andrew Rode	NSW Minerals Council

Apologies

Greg Sullivan	NSW Minerals Council
Ron Fenwick	UHMD - Individual Contact
James Benson	Anglo American
Harry Egan	Peabody Energy
Wendy Bowman	NSW Mine Watch
Adam Gilligan	NSW Environment Protection Authority
Ken Bray	Hunter Valley Water Users' Association
James Barben	Yancoal Australia

1. Welcome and Apologies

The Chair welcomed attendees and noted apologies. The Chair noted a drop in attendance and that a quorum had not formed for the meeting. The members present decided to proceed with the meeting in the absence of a formal quorum.

2. Minutes and actions of the previous meeting

The minutes of the 12 November 2015 meeting were confirmed.

3. Water Resources Map

Andrew Rode provided an update on the water resources map, advising that DRE was working on an updated test version of Common Ground.

4. Hunter Bioregional Assessment

The working group discussed the *Coal and CSG resource assessment* document. Julie Thomas advised that some sections relating to West Muswellbrook were incorrect. The working group agreed to review whether any other sites were also incorrect, and advise the Office of Water Science, and other relevant agencies.

ACTION:

- NSWMC to seek review of the *Coal and CSG resource assessment* from industry members and advise of any necessary changes to the Office of Water Science, Division of Resources and Energy and DPI - Water.

5. MCA Water Accounting Framework

The working group reviewed the 2015 water accounting framework information and suggested that since there was delay in preparing the 2014 data, that the 2015 data should be the focus of the media release and exclusive story. The 2014 data would be released as a soft-launch to the website only. The working group also suggested that the rainfall data be checked, as it seemed higher than expected.

ACTIONS:

- NSWMC to postpone release of MCA Water Accounting Framework data until the 2015 data is available.
- NSWMC to review the rainfall data for the Upper Hunter.

6. Hunter River Salinity Trading Scheme Review

The working group discussed EPA's proposal for companies to monitor metals in their discharge water. The working group suggested that the work should be supported by regional monitoring program of the background metals / metalloid levels in the Hunter River that should be undertaken by the NSW Government.

ACTIONS:

- Chris New to discuss the EPA's approach to monitoring metals in discharge water at the HRSTS Committee meeting.
- NSWMC to organise a meeting with EPA to discuss its proposal for companies to monitor metals in discharge water.

7. Voids project

The working group agreed that a regional committee should be established to provide a strategic view of voids (and rehabilitation / post-mining land use). It was important to consider how this initiative would tie together with the update of the Upper Hunter Synoptic Plan.

ACTION:

- NSWMC to arrange a meeting with the Department of Planning and Environment and the Division of Resources and Energy to discuss a voids/rehabilitation Upper Hunter regional committee and how it may tie in with the update of the Upper Hunter Synoptic Plan.

8. UHMD Annual Forum Report

The working group reflected upon the fact that public outrage associated with mining in the Upper Hunter had diminished significantly and that the UHMD was becoming less concerning for several community members. It was therefore considered appropriate to consider consolidating working groups, reducing the regularity of meetings. Some of the projects (such as the water accounting reporting and rehabilitation reporting) could potentially continue without much direct review and involvement with the community members. Overall it was believed that the working group and UHMD could be transitioned to a less resource intensive exercise and that community and other members could be brought together to deal with any emerging and key issues.

9. Update on UHMD communications initiatives

The working group noted the communications updates.

The working group was very supportive of the schools tours idea, suggesting also that they be built into their science / STEM courses. It was suggested that in the medium to long term these tours could include the whole coal production and export system, including the power stations, train lines and ports. It was also suggested that collateral and videos be provided to students whilst on the buses.

10. Working group performance, relevance and strategic direction

The working group suggested that some of the considerations about the working group's strategic direction be considered post a UHMD resurvey.

Due to the reduced attendance at meetings it was suggested that the Joint Advisory Steering Committee consider whether the water working group should be discontinued.

ACTION:

- NSWMC to ensure UHMD resurvey considers the importance of water issues.
- JASC to consider whether to discontinue water working group.

11. Other Business

Andrew Rode advised that Anglo American was no longer a member of the NSW Minerals Council, or the Upper Hunter Mining Dialogue.

The meeting closed at 12:10pm.

**Actions arising from meeting on 11 May 2016
UHMD Water Joint Working Group Meeting**

Action	Responsibility	Status
1. Welcome and Apologies		
2. Minutes and actions of previous meeting		
3. Water Resources Map		
4. Hunter Bioregional Assessment		
<ul style="list-style-type: none"> NSWMC to seek review of the <i>Coal and CSG resource assessment</i> from industry members and advise of any necessary changes to the Office of Water Science, Division of Resources and Energy and DPI - Water. 	NSWMC	Completed
5. MCA Water Accounting Framework		
<ul style="list-style-type: none"> NSWMC to postpone release of MCA Water Accounting Framework data until the 2015 data is available. 	NSWMC	In progress
<ul style="list-style-type: none"> NSWMC to review the rainfall data for the Upper Hunter. 	NSWMC	Completed
6. Hunter River Salinity Trading Scheme Review		
<ul style="list-style-type: none"> Chris New to discuss the EPA's approach to monitoring metals in discharge water at the HRSTS Committee meeting. 	Chris New	Completed
<ul style="list-style-type: none"> NSWMC to organise a meeting with EPA to discuss its proposal for companies to monitor metals in discharge water. 	NSWMC	Completed
7. Voids project		
<ul style="list-style-type: none"> NSWMC to arrange a meeting with the Department of Planning and Environment and the Division of Resources and Energy to discuss a voids/rehabilitation Upper Hunter regional committee and how it may tie in with the update of the Upper Hunter Synoptic Plan. 	NSWMC	In progress
8. UHMD Annual Forum report		
9. Update on UHMD communications initiatives		
10. Working group performance, relevance and strategic direction		
<ul style="list-style-type: none"> NSWMC to ensure UHMD resurvey considers the importance of water issues. 	NSWMC	Ongoing
<ul style="list-style-type: none"> JASC to consider whether to discontinue water working group. 	NSWMC	Completed
11. Other business		

Agenda Item 3

WATER RESOURCES MAP

Issue

DRE has prepared a test version of an updated Common Ground mapping platform that includes most of the water layers that the JWG - Water requested. It is not known when the updated version will be released.

Background

NSWMC provided the following feedback on the water layers:

- That there should be an option where no mineral or coal resources are shown, this is so water and other layers can be viewed without the title overlays.
- For the groundwater layer, it was difficult to know which part is inside the groundwater boundary and which part is outside. Therefore it was recommended that the areas have an internal shading.
- For the groundwater bores, that there be a link in the information section to the more detailed information (if available) i.e. <http://www.water.nsw.gov.au/realtime-data/groundwater>
- NSWMC had originally requested that the river monitoring locations be included (including the Hunter Integrated Telemetry System), however unfortunately these were not included. It was recommended that these be included in a later version with a link to the following real-time telemetry data:
http://realtimedata.water.nsw.gov.au/water.stm?ppbm=SURFACE_WATER&rs&3&skm_org

FOR INFORMATION / DISCUSSION

Agenda Item 4

HUNTER BIOREGIONAL ASSESSMENT

Issue

The Bioregional Assessment Programme (BAP) released a *Coal and coal seam gas resource assessment* for the Hunter subregion.

Background

The coal and coal seam gas resource assessment for the Hunter subregion summarises the known coal and coal seam gas resources and developments as at November 2015. It is available for download here:

<http://data.bioregionalassessments.gov.au/product/NSB/HUN/1.2>

The information in this product will be used to develop the coal resource development pathway.

Coal and coal seam gas resources

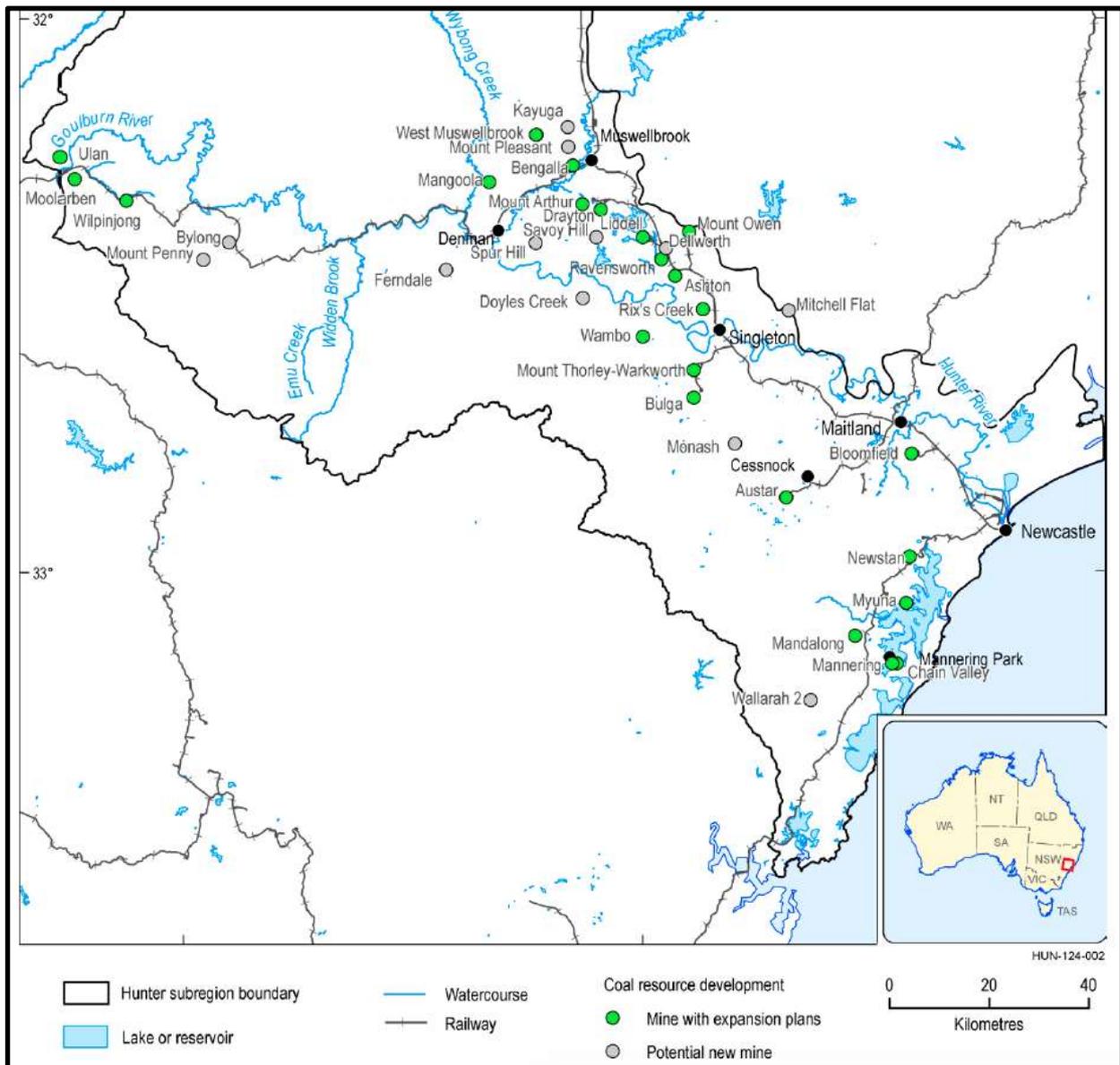
Coal and coal seam gas resources in the Hunter subregion are contained within the Hunter, Newcastle and Western coalfields of the geological Sydney Basin. The major economic coal seams mined in the Hunter Coalfield are part of the Greta and the Wittingham coal measures.

Current activity and tenements

As at May 2015 there were 25 operating coal mines and complexes in the Hunter subregion. Six mines were either in care and maintenance or had recently closed. No coal seam gas is currently produced in the Hunter subregion, although a number of wells have been drilled for exploration.

Proposals and exploration

As at November 2015 there were 27 proposals to extend or expand existing operations and 15 proposals to initiate new mines. These are shown in the figure below.



NSWMC would also like to reiterate some information contained within the previously discussed Context Statement for the Hunter Subregion, available here:

<http://www.bioregionalassessments.gov.au/assessments/11-context-statement-hunter-subregion>

“The Permian units [250-300 million years ago] are associated with a series of coal measures and intervening marine sequences. The saline water associated with this geological unit is thought to have a controlling influence on the overall water quality of the Hunter River (Kellest et al., 1989). Groundwater quality is generally brackish to saline (Mackie Environmental Research, 2006). Salinity within the hard rock aquifers associated with the Hunter coal seams is typically in the range 4000 to 12,000 $\mu\text{S}/\text{cm}$, but electrical conductivity (EC) has been recorded at over 26,000 $\mu\text{S}/\text{cm}$.”

That is, the reason that mines in the Hunter experience salinity in their waters is because the coal deposits are associated with a historically marine-based (therefore salty) environment. This has no relationship with whether or not there are heavy metals in the waters.

FOR INFORMATION / DISCUSSION

Agenda Item 5

MCA WATER ACCOUNTING FRAMEWORK

Issue

The presentation of 2014 MCA Water Accounting Framework (WAF) information continues to progress. NSWMC has received water figures for 2015 from companies and has engaged Hydro Engineering and Consulting (HEC) to collate the data.

Background

2014 MCA WAF promotional material

Following advice of the JWG, the 2014 data will be released as a unpromoted launch on the UHMD website, with the focus of the promoted release being the 2015 data.

2015 MCA WAF

Following advice from the NSWMC Communications Director and Media Director, the publication of the MCA WAF data for 2015 will have a multi-tiered approach:

- Release of the information as an exclusive to the Newcastle Herald, supported by:
 - A media release.
 - An 'advert' summary of key information for print media and social media (see attached).
 - Detailed results to be uploaded on the UHMD webpage (see attached infographic).
- Paid advertising of the 'advert' for the Muswellbrook Chronicle and Singleton Argus, shortly after the Newcastle Herald.
- Potential radio opportunities, depending on the level of interest.

NSWMC has engaged Hydro Engineering and Consulting (HEC) to collate the data for the 2015 MCA WAF summary and provide a quality assurance service.

FOR INFORMATION / DISCUSSION

THE HUNTER RIVER

A precious water resource for the Upper Hunter community.



Upper Hunter Mining Dialogue

2014 was a drier than average year. That year

195 BILLION LITRES

entered the Hunter River system.

48%

of that water stayed in the river.

49%

was extracted and used by farmers, residents and businesses.

MINING

used less than

3%

of the water in the system.

UPPER HUNTER WATER BALANCE



Upper Hunter Mining Dialogue

Mining's water use

The Upper Hunter Mining Dialogue assessed water use by the mining industry in the Upper Hunter in 2014. 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.



ALMOST 10x

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 3%

of the Hunter River System's water

88%

of mine water came from lower quality sources with few other practical uses.

48%

of mine water is sourced from onsite rainfall and runoff

34%

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

The mining industry

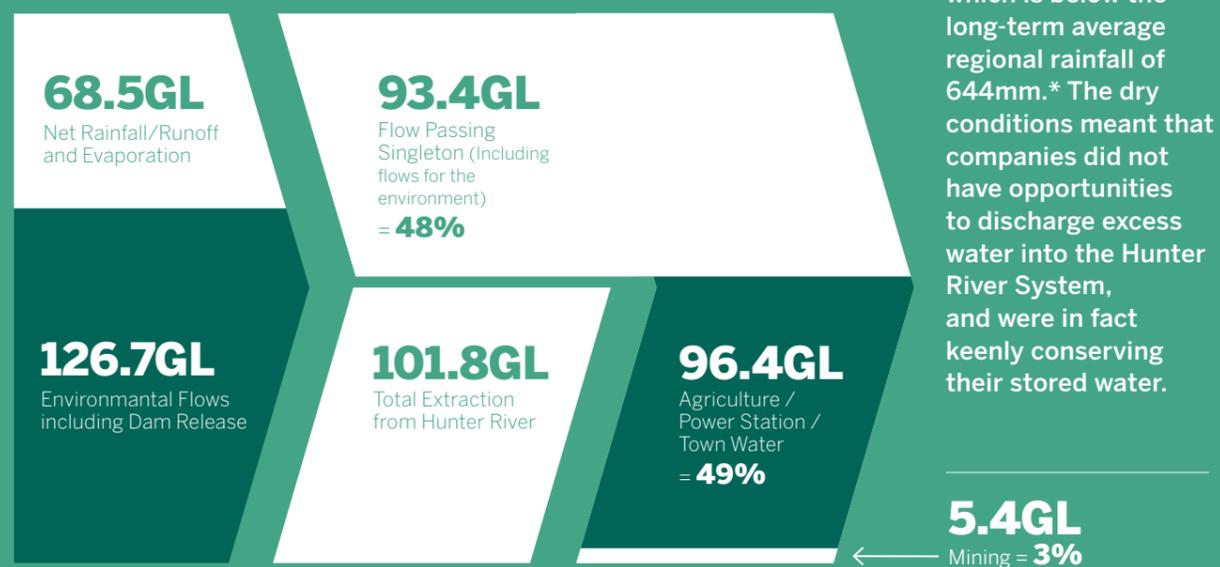
REUSES 51%

of its water onsite

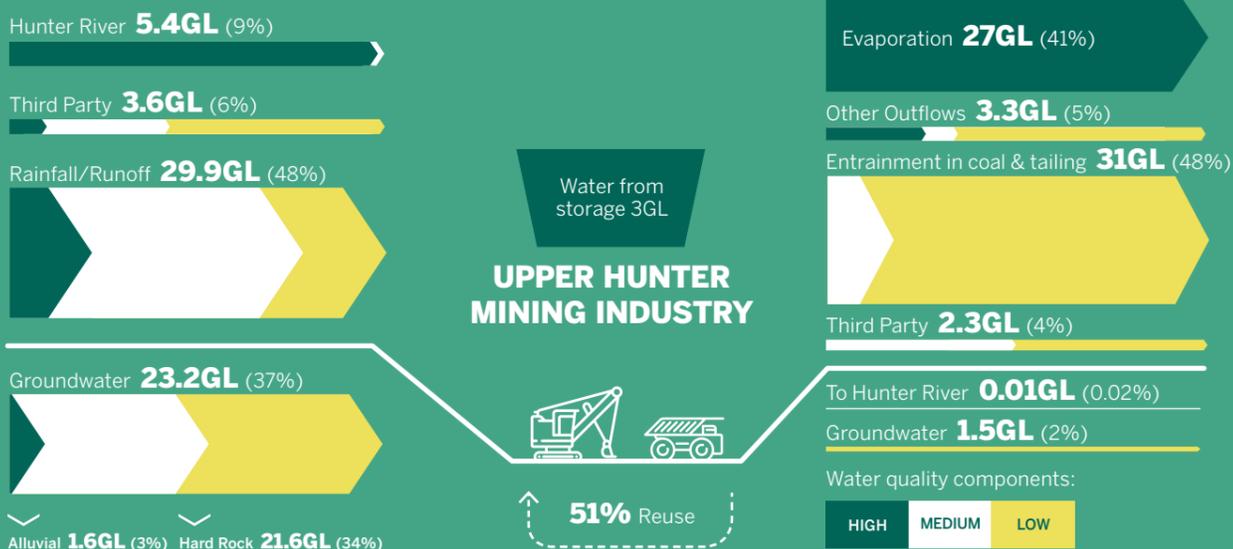
Only **0.02%**

of mine water was discharged into the Hunter River

Hunter River System Extraction



Mining Industry Water Use Balance



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 this infographic. References: NSW Environment Protection Authority 2013, Hunter Catchment Salinity Assessment, prepared by the Office of Environment and Heritage. * Based on rainfall at Scone, NSW.

Agenda Item 6

HUNTER RIVER SALINITY TRADING SCHEME REVIEW

Issue

The Hunter River Salinity Trading Scheme (HRSTS) Review has been progressed through the EPA's release of a draft Amendment Regulation and a supporting 'Report and Recommendations'.

Background

In late January 2016, EPA released an Amendment Regulation 2016 in relation to its review of the Hunter River Salinity Trading Scheme (HRSTS). It also released a 'Report and recommendations' to support the review, which stated that *"the EPA will consider the most appropriate mechanism for further investigating the issue of other contaminants that may be present in participant discharge waters and their impacts on the Hunter River catchment."*

The documents are available here:

<http://www.epa.nsw.gov.au/licensing/hrsts/regreview.htm>

NSWMC's submission recommended that *"In collaboration with the Upper Hunter Mining Dialogue, the EPA should investigate and characterise the chemistry of discharge water and the effect of its interaction on the Hunter River catchment."*

The EPA has subsequently advised NSWMC that:

"The EPA's Hunter Office is in the process of scoping out a project to:

- *Characterise and assess the potential impacts of metals in mine discharges from Upper Hunter coal mines; and*
- *Assess the potential impacts of the metals on the receiving environment.*

The mining industry will be consulted on the project proposal. The EPA will also work with relevant licensees to develop pollution reduction studies, which will be incorporated into their licences. The conditions are likely to require licensees to:

- *Monitor concentrations of metals and metalloids in their mine water discharges.*
- *Assess the likely impact of those parameters on the receiving environment.*
- *Report on the findings of those investigations.*

The EPA will then consider the findings of these studies, individually and collectively, and determine whether any additional work is needed to reduce metal concentrations and loads being discharged."

NSWMC and some members met with the EPA to discuss the proposed project and suggested that the results of the studies could be misleading if they are not able to be considered in the context of broader information on the background metals concentrations in the Hunter River. It was therefore recommended that the NSW Government undertake and fund a parallel study that investigates the background metals concentrations along the Hunter River, during both low flow and discharge events.

If this work were to be undertaken in 2016/17, it would better inform the industry's assessment of the environmental impact of any metals in its discharge water.

FOR INFORMATION / DISCUSSION

Agenda Item 7

VOIDS PROJECT

Issue

The voids project deliverables have been finalised with the development of a workshop report, a water quality review and a void water quality monitoring guidance note.

Background

NSWMC has prepared a draft media release, draft updated web content and is also preparing a UHMD article to go out to UHMD participants about the completion of the finalised study.

NSWMC will be meeting with DPE and DRE to consider how best to develop a Upper Hunter Regional Committee on rehabilitation (and voids).

FOR INFORMATION / DISCUSSION

Agenda Item 8

UPDATE ON UHMD COMMUNICATIONS INITIATIVES

Issue

The UHMD held a successful Muswellbrook Community Day event on 25 November 2015. There are a number of other communications initiatives currently being planned.

Background

Recent initiatives

The UHMD recently progressed its focus on communications through:

- A trade booth at the Singleton Community Day (part of the Hunter Coal Festival) on 2 April 2016.
- A presentation, trade booth and Gold Sponsorship at the Tom Farrell Institute 2016 Rehabilitation Conference on 7 April 2016.
- A trade booth at the Tocal Field Day over 29 April - 1 May 2016.
- The preparation of various UHMD promotional collateral.
- The preparation of a basic community survey for use at the above field days.

Future initiatives

Future communications initiatives that are planned include:

- Undertaking UHMD website updates.
- A detailed UHMD resurvey of the community.
- Investigating options for providing mine tours to Upper Hunter schools.

FOR INFORMATION / DISCUSSION

Agenda Item 9

WORKING GROUP PERFORMANCE, RELEVANCE AND STRATEGIC DIRECTION

Issue

NSWMC is interested to discuss the working group members' perspectives on how the working group is performing and whether the activities and issues are still relevant and important for members. Any suggestions on the strategic direction of the UHMD and this working group are welcome.

Background

To prompt thinking and discussion, NSWMC poses the following questions for consideration:

- How well do you believe the working group is performing?
- Are the working groups projects, activities and issues still relevant and important and of interest?
- Are the working group goals still relevant?
- What could be improved to make the working group more effective?
- Are there any strategic changes that could be made to the UHMD or the working group?

The working group goals are provided, for reference:

1. To develop a better understanding of the region's water resources and the existing and potential impacts of development on the Hunter Valley catchment.
2. Demonstrate and promote responsible and efficient use and management of water in the Hunter Valley.

RECOMMENDATION

That the working group provide feedback on the working group's performance, relevance and any areas that could be improved.

FOR INFORMATION / DISCUSSION