

**Actions arising from meeting on 8 May 2014
UHMD joint water working group**

Action	Responsibility	Status
1. Welcome and Apologies		
2. Confirmation of Minutes of 14 November 2013		
3. Update on current projects		
<ul style="list-style-type: none"> NSWMC to ask the Office of Water Science to clarify the scope of any water quality assessments to be undertaken. 	NSWMC	
4. December workshop feedback		
<ul style="list-style-type: none"> NSWMC to consider including CSG groundwater bore water monitoring data on the water resources map. 	NSWMC / DRE / NOW	
<ul style="list-style-type: none"> NSWMC to approach CSG industry (AGL / Santos) to gain an understanding of the progress of their operations in the Hunter and any water-related studies that have been completed to date. 	NSWMC	
<ul style="list-style-type: none"> NSWMC and working group members to develop a number of concepts for presenting MCA Water Accounting Framework data. 	NSWMC / working group	
<ul style="list-style-type: none"> NSWMC to invite broader stakeholders to the following December workshop, inviting them to also join working groups of interest at that time. 	NSWMC	
5. Review of Hunter River Salinity Trading Scheme		
6. Other business		
<ul style="list-style-type: none"> Bill Collins to discuss his ACARP proposal with the EPA to determine whether it aligns with the EPA's final recommendations for the HRSTS Review and whether any existing funds have already been allocated. 	Bill Collins	
<ul style="list-style-type: none"> NSWMC to prepare and circulate a draft letter of support for the ACARP Proposal to the Joint Working Group, with various conditions relating to EPA's position on the scope of the research. 	NSWMC / working group	

DRAFT Minutes

**UHMD Joint Working Group – Water meeting
Quest Singleton Serviced Apartments
Thursday 8 May 2014 – 10:00am- 1:00pm**

Present

David O'Brien (Chair)	Glencore
Morgana Gidley-Baird	BHP Billiton – Mt Arthur Coal
James Benson	Anglo American Metallurgical Coal
Chris New	Rio Tinto – Coal & Allied Industries
Greg Lamb	Bloomfield Collieries
Dan Byrne	Vale – Integra Coal Operations
Alan Tight	Yancoal – Ashton Coal Operations
Wendy Bowman	NSW Mine Watch
Bill Collins	The University of Newcastle
Bruce Whitten	Hunter Valley Water Users' Association
Andrew Rode	NSWMC
Claire Doherty	NSWMC
David Frith	NSWMC
Brad Deane	NSWMC

Apologies

Ron Fenwick	UHMD - Individual contact
Steve Clarkson	Singleton Council
Ken Bray	Hunter Valley Water Users' Association
Arthur Burns	Hunter Valley Water Users' Association
Chris Knight	Muswellbrook Coal
Rebekah Gomez-Fort	NSW Department of Primary Industries
Aled Hoggett	NSW Farmers Association
Steve Eccles	Hunter-Central Rivers CMA
Troy Favell	Peabody Energy – Wambo Coal

1. Welcome and Apologies

David O'Brien welcomed attendees of the Joint Working Group - Water and apologies were noted. David advised that a quorum was not present.

2. Confirmation of the minutes and update on actions from the 14 November 2013 meeting

The minutes of the 14 November 2013 meeting were confirmed. Andrew Rode provided an update on the actions from the meeting.

3. Update on current projects

MCA Water Accounting Framework

Each mining company provided an update on progress on stage 2 of the MCA Water Accounting Framework, which is due on 30 June 2014. BHP Billiton Mt Arthur, Anglo American, Ashton Coal and Glencore have implemented stage 2. Vale and Bloomfield are currently working on stage 2.

IESC project / Hunter bioregional assessment

Andrew Rode advised that NSWMC will be keeping track of the various technical reports (13 in total) that are due to be released throughout the Hunter Bioregional Assessment, which is due to

commence in late 2014 or early 2015 and be completed in 2016.

The working group discussed whether water quality as well as water quantity issues would be investigated, and if so, which water quality parameters would be considered.

Water Resources Map

Andrew Rode advised the working group that NSWMC will in the following week be meeting with the Division of Resources and Energy and the Office of Water to discuss moving the map to an online system.

Hunter River Water Quality Assessment

It was agreed that this item would be discussed during Item 5.

ACTIONS

- NSWMC to ask the Office of Water Science to clarify the scope of any water quality assessments to be undertaken.

4. December workshop feedback

Andrew Rode provided an overview of the feedback received at the December workshop in relation to the Water JWG's projects, with the working group discussing individual questions in further detail, as outlined below.

Water accounting framework

Technical / data

David O'Brien advised that the water accounting framework does not specify how the figures are to be measured but report the level of accuracy for each figure depending on whether it is measured (highest accuracy), estimated or simulated (lowest accuracy). For example run-off coefficients are used to *simulate* how much water is collected and how much is absorbed into the soil and groundwater. The accuracy of the different figures would therefore vary across the mine sites.

Coal seam gas (CSG) figures were not reported as CSG companies are not part of the UHMD at this time. Bill Collins advised that the CSG industry's work on understanding and characterising groundwater is very detailed and could be captured in the water resources map.

The CSG industry is not part of the NSW Minerals Council, however its impacts will be assessed as part of the bioregional assessment for the Hunter. The Working Group thought an update from the CSG industry on its progress and water-related studies would be useful.

Communication / next steps

The working group discussed how the Water Accounting Framework could be shared with the general public, for example, reporting on a website, providing aggregated mine data and including the operational model. The working group emphasised the importance of presenting data clearly and in a user-friendly manner. Bill Collins suggested a colour coded rating scheme to communicate which areas are working well and which aren't working so well. Bill also suggested reporting the figures in a newspaper. Websites were seen as important but only if people are driven there. It was felt that the information could be provided at a high-level, with the public able to extract more detailed information if interested, including individual mine data. David O'Brien advised that the industry's Dialogue members are working to develop a communications strategy to consider the communication of all of the projects, using a range of communications methods.

Hunter River Water Quality Assessment Project

Sources of contaminants / metal and other contaminants / background levels and monitoring

Many of the water quality related questions are likely to be addressed through the recommendations

from the Review of the Hunter River Salinity Trading Scheme (HRSTS).

Reuse and recycling

- Some mines treat water to a higher standard (typically through a reverse osmosis process (RO)), but this isn't common in the Hunter Valley. However sites in Ulan, Queensland and some of the mines in the Illawarra undertake this form of treatment when appropriate. However RO creates a highly concentrated saline brine that has to be managed separately. Water with high pH or metals can also be treated.
- Additives need to be appropriately managed through the use of Material Safety Data Sheets (MSDS) and by ensuring they don't cause issues with the quality of discharge waters.

Broader issues - progress of the Dialogue and communication

Recruitment of new groups

The working group discussed whether stakeholder representation on the Joint Working Group was appropriate, in particular in relation to state government representation. Some absent working group members are from government agencies, however for example, the EPA and Office of Water said they would attend meetings as they needed to. Government representation was low during the December workshop, however this was believed to be due to a clash of commitments.

David O'Brien suggested that other groups could be approached to attend the following December workshop, where interested individuals could then join specific joint working groups.

ACTIONS

- NSWMC to consider including CSG groundwater bore water monitoring data on the water resources map.
- NSWMC to approach CSG industry (AGL / Santos) to gain an understanding of the progress of their operations in the Hunter and any water-related studies that have been completed to date.
- NSWMC and working group members to develop a number of concepts for presenting MCA Water Accounting Framework data.
- NSWMC to invite broader stakeholders to the following December workshop, inviting them to also join working groups of interest at that time.

5. Review of Hunter River Salinity Trading Scheme

Andrew Rode provided an overview of some of the key findings in the HRSTS Discussion Paper, including a reference to NSWMC's call for additional investigative studies to be undertaken in its submission.

Bruce Whitten provided an overview of the Hunter Valley Water User Association's submission to the HRSTS Review. Some of the main points included:

- General satisfaction with the results of the Scheme.
- Concerns around altering salinity targets to allow more opportunities to discharge.
- The importance of controlling discharges not covered by the Scheme.
- Consideration of inclusion of other pollutants other than salt in the Scheme if / when further studies identify them.
- A call for better monitoring and additional parameter sensors (e.g. pH, TDS)
- Excess funds should be used to improve the catchment environment and / or work towards the Scheme aims.

6. Other Business

Hunter River Health Report Card

Bill Collins advised that he is developing a concept around a Hunter River health report card, which is based on the Fitzroy River Partnership. It involves using data from a range of sources to determine ratings for high versus low water quality for the entire Hunter Catchment.

Bill tabled two documents (attached) that provide an executive summary and also an estimated budget of the proposal. The proposal responds to comments made in the EPA's Discussion Paper on the HRSTS, specifically in relation to: firstly, trigger points for degradation of macroinvertebrate health; and secondly, investigating pollutants such as heavy metals, other ions, organic compounds and nutrients (such as Phosphorus and Nitrogen) - which are not necessarily mine related but also factors of agricultural and urban contamination.

Bill advised that several of the state's government agencies were very interested in being involved in this (including Office of Water, Office of Environment and Heritage, Local Land Services, Department of Primary Industries (Fisheries and Agriculture groups) and Hunter Water). Bill advised that he will be hosting a meeting with various government agencies with the aim of setting up a partnership to address Hunter River health. This would be followed by an all stakeholder meeting in June to see how a partnership could be formed.

Bill is looking at potentially having this project funded by ACARP¹. The ACARP funding would be required to get the report card's rating scheme established. After the project is completed, Bill is hopeful that stakeholders would contribute \$10,000-\$20,000 per annum to maintain an annual report card on an ongoing basis.

The working group considered that the EPA was the key stakeholder that should be engaged, since it administers the HRSTS, is coordinating the HRSTS review and preparing a response to the findings of the Hunter Catchment Salinity Assessment. A proposal to ACARP may be premature without knowing EPA's final recommendations or being aware of any pre-allocated funds for research from the HRSTS Review (or surplus funds from HRSTS auctions). Bill advised that ACARP proposals were due the following week which limited the timeframe for undertaking negotiations, but nevertheless EPA's recommendations would be known by ACARP before the final round of research judging in September 2014.

The working group felt that a Hunter River health card should identify hotspot areas that contribute a high amount of salts due to dryland salinity.

Management of voids

The working group discussed the issue of mine voids. The Land Management working group has a project that specifically looks at beneficial reuses of mine voids, which includes water storages, tailings storage, aquaculture and golf courses.

ACTIONS

- Bill Collins to discuss his ACARP proposal with the EPA to determine whether it aligns with the EPA's final recommendations for the HRSTS Review and whether any existing funds have already been allocated.
- NSWMC to prepare and circulate a draft letter of support for the ACARP Proposal to the Joint Working Group, with various conditions relating to EPA's position on the research.

7. Next meeting

The next meeting will be on 31 July 2014.

The meeting closed at 11:50 am.

¹ Australian Coal Industry's Research Program.