



Sue Gilroy and Mike Kelly

ANSWERING THE CALL FROM THE COMMUNITY

Formed in 2011 after calls from the Upper Hunter community for a collaborative effort to lessen the cumulative impacts of mining in the region, the Dialogue today has a wide-ranging representation of people from the community, government bodies and the mining industry.

In this edition, we talk to two of the Dialogue's community representatives – Sue Gilroy and Mike Kelly.

First attending meetings in 2010 and now a community member of the Dialogue's Joint Advisory Steering Committee, Mike Kelly believes the Dialogue has broadened the scope of issues it examines and discusses including topics such as land use

and management, water management, emissions and health, social and economic impacts and infrastructure planning.

Mike is also the president of the Muswellbrook Chamber of Commerce and a member of the Dialogue's Joint Economic and Social Development Working Group.

He believes the Dialogue is important because it

“provides a forum for business, government, regulators and community members to exchange ideas to improve the Upper Hunter environment and economy”.

“It promotes co-existence with all,” Mike says.

With a background in health services, occupational health in mining and business consultancy, current Singleton Business

Chamber President Sue Gilroy has been involved with the Dialogue since 2017.

Now a community member of the Joint Advisory Steering Committee and a member of the Joint Economic and Social Development Working Group, Sue says “the Dialogue has grown organically to encompass the growing awareness around the needs of the local community”.

Sue believes people should be involved in the Dialogue “to build awareness and provide input into the work of the Dialogue and what it does within the community”.

UPPER HUNTER MINING DIALOGUE NEWSLETTER

THE DIALOGUE

NOVEMBER 2020

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WORKING TOGETHER FOR BETTER LIFE FOR ALL

The Upper Hunter Mining Dialogue (the Dialogue) was established in 2011 by the region's miners in response to community concerns about infrastructure and services, mine rehabilitation, water use and air quality.

The Dialogue brings together local miners, community and business leaders, environment groups, residents, regulators and other industries to better understand and address these challenges together and create a better life for all in the Upper Hunter.

The Dialogue is a collaborative effort addressing local community priorities by understanding its concerns and then working together to develop and implement solutions.

If you're interested in becoming involved in the Dialogue, please register your interest via email to info@nswmining.com.au



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THE WORD FROM THE CHAIR

Sarah Withell
UHMD Chair



As we near the end of a momentous 2020, it is timely to reflect on the Dialogue's accomplishments in this most difficult of years.

The key role of the Dialogue is to have respectful conversation so that we can identify and work together to resolve issues which are of importance to our communities. This year has been a year where these conversations were more important than ever and I am extremely pleased that we have been able to continue our work. As I wrote my last column for the Dialogue's April/May newsletter we were all looking forward to, literally, a break in the weather as at long last the drought appeared ready to end.

Still, we were keeping a close eye on the gathering storm clouds of Covid-19. At that time we were all exercising caution but very few of us, if anyone, could know of the impact Covid would have on not only us but the entire world.

That said, I am proud of how our community has worked together to not only survive but thrive during the pandemic restrictions. Special mention should go to our industry partners which have not only continued their support of the community but, in many cases, greatly increased it in a time of need.

However, despite the challenges, we did deliver important results in 2020. Like the rest of the Upper Hunter community, the Dialogue has had to alter its operations including postponing a number of activities involving face to face public interaction. During this time our Joint Advisory Steering Committee and Working Groups have quickly and effectively moved to meeting online and fulfil their important roles at making the Upper Hunter a better place for all to live. Our annual projects tracking rehabilitation of mined land and the use of Hunter River water have just been finalised and the results have been published.



ZOOMING IN

The Dialogue's Working Groups have kept their meeting schedules over the past six months despite restrictions on gatherings and social distancing requirements due to Covid-19. Meetings have been conducted over the internet through the Zoom online communications platform.

At our Annual Forum in 2019 we presented the initial results of a project studying the changes in air quality in the Upper Hunter. Through engagement at the Annual Forum we have taken on feedback on the presentation of the results of the study, had it peer reviewed by the CSIRO and it has now been finalised. We have also finalised our study of the Hunter River's water quality.

We are now working towards and looking forward to a busy 2021 and will kick off the year's schedule once it is safe to do so.

On behalf of the Dialogue I wish our entire Upper Hunter community a safe and Merry Christmas and a momentous, for all the right reasons, New Year in 2021.

As always, the Dialogue welcomes new community participants. If you're interested in "helping make the Upper Hunter a better place for all" please contact us at info@nswmining.com.au

We would very much like to have a "Dialogue" with you.

INTERESTED IN WHAT THE DIALOGUE DOES? TAKE A LOOK AT OUR 2019 FORUM VIDEO: www.miningdialogue.com.au/dialogue/events

CLEARING THE AIR

STUDY TRACKS AIR QUALITY CHANGES

Trends in air quality levels in the Upper Hunter have mirrored changes in air quality in other NSW regions over the past seven years, according to a new Dialogue study.

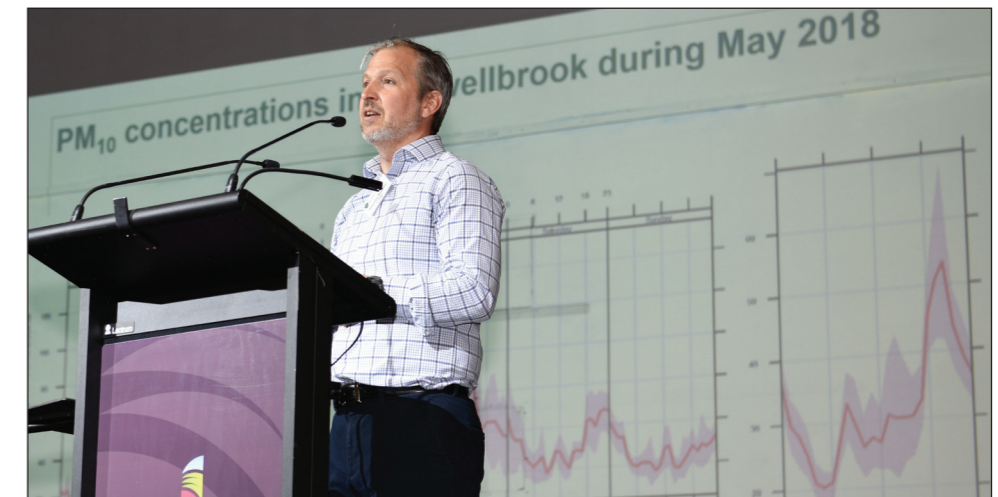
And, the study found that, while the Upper Hunter experienced overall declines in air quality during 2019 compared with previous years, the same deterioration in air quality was observed across NSW.

The Dialogue's Air Quality Monitoring Project commissioned consultants ERM to analyse air quality data recorded by the Government's Upper Hunter Air Quality Monitoring Network and seven other regions' Government run air quality monitoring stations.

The project's results were peer reviewed by the CSIRO and its comments have been incorporated in the study's recently published full results.

The study report identifies a strong correlation between lack of rainfall and an increase in particulates with a corresponding drop in air quality. It specifically notes the highest levels of PM10 concentration occurred in the 2018 and 2019 years of drought.

The analysis shows the 2018 and 2019 increase occurred across all



ERM's Damon Roddis delivers preliminary results of the Air Quality Monitoring Project at the 2019 Annual Forum.

regions included in the study. The biggest increase occurred across all areas in 2019 which was the driest year on record.

Further, the study found no correlation between the increase in PM10 and PM2.5 levels and increased coal production in the Upper Hunter. While coal production levels in the Upper Hunter remained relatively steady across the study period, particulate matter levels increased which points to "regional conditions such as rainfall and are indicative of a minimal change in contribution from local emission sources inclusive of mining."

The study's comparison of PM2.5 levels found trends similar to the

PM10 concentrations.

"As consistent with PM10 monitoring results, PM2.5 concentrations are elevated across 2018 and 2019, with the highest concentrations measured at the Upper Hunter Air Quality Monitoring Network large populations station group, which likely contains a significant influence from wood smoke (CSIRO, 2013). Trends in annual average concentrations were also found to be consistent with the remainder of NSW." the report concludes.

The full study will be published on the Dialogue's website at miningdialogue.com.au

COMPARING AIR QUALITY

The Dialogue's Joint Environment Working Group commissioned consultants ERM to undertake an Air Quality Monitoring Project that analyses the air quality trends recorded by Upper Hunter and other regions' DPIE air quality monitoring stations.

The project's results were peer reviewed by the CSIRO and its comments have been incorporated in the study's recently published results.

As well as data recorded by the Upper Hunter Air Quality Monitoring Network's monitoring stations, trends from 2013 to 2019 (inclusive) were analysed from stations located in the Central Tablelands, Illawarra,

Lower Hunter and Central Coast, North West Slopes, South West Slopes, Sydney East, Sydney North West and Sydney South West.

The project was prompted by community representatives at the Dialogue's 2018 Annual Forum and was designed to investigate two key issues regarding air quality:

1. That air quality in the Upper

Hunter was worse than in other NSW region.

2. That Upper Hunter Air Quality was deteriorating compared to other areas in NSW.

The project was tasked with answering two questions:

1. Has the air quality in the Upper Hunter changed since monitoring began?

2. Is the air quality in the Upper Hunter measured at the monitor stations different from air quality measured at other locations in NSW?

MINING GOES WITH THE FLOW

DATA MEASURES HUNTER RIVER WATER USE



The Dialogue has released its annual data tracking the mining industry's water use for 2019.

The mining industry continued to be a relatively low user of Hunter River water in 2019, according to new data from the Upper Hunter Mining Dialogue.

The Water Accounting Framework was started in 2014 and now provides six years of data primarily tracking water extraction from the Upper Hunter region of the Hunter River including usage by the mining industry, agriculture and residential use.

Due to the drought conditions and lack of other sources, combined water users extracted more water from the

Hunter River than in 2018, however, the additional usage was more than offset by increased "environmental flows" into the river through the release of more water from storage dams.

Key findings from the 2019 Water Accounting Framework data:

- In a drier than average year, 214 billion litres of water entered the river system in the Upper Hunter which was 26 billion litres more than in 2018 due to more water being released from storage dams for "environmental flows".
- 33% of that water stayed in the river system, up from 28% in 2018.
- Mining used less than 8% of the water in the system which was the

which assessed the potential for metal(loid) contamination of water quality from discharge of mine water under the HRSTS scheme.

The initial study was conducted by the University of Newcastle's International Centre for Balanced Land Use and overseen by a working group consisting of community members, industry and the Environmental Protection Authority. It found no issues caused by water discharged from mine sites into the river system and found the

same percentage as the previous year, however, the actual usage by the industry was up by 4.0 gigalitres from 2018.

- The amount of water extracted and used by agriculture, residents and businesses was 58%; a reduction on the 65% in 2018 but an increase of 3.0 gigalitres in actual water extracted.
- The mining industry reused 55% of its water onsite; up from 46% in 2018.
- 30% of mine water came from rivers and alluvial aquifers – up from 28% in 2018.
- 6% of mine water was sourced from onsite rainfall and run off – down from 27 % in 2018.
- 35% of mine water was sourced from deep aquifers that are of limited use to other water users due to high salinity which was an increase from 33% in 2018.
- No mine water was discharged into the Hunter River in 2019; a repeat of 2018's result.

For full results of the 2019 Water Accounting Framework project, go to miningdialogue.com.au/dialogue/latest-projects

overall metal(loid) concentrations in discharge dams were low.

The study was extended to specifically examine nitrates and understand the effects, if any, they might have if discharged into the river.

The follow on study concluded nitrate levels in discharge dams were not a concern as the concentrations would be lower than guideline levels during discharge events under the HRSTS scheme.

DIALOGUE PLANS A BUSY 2021

The Dialogue has had a busy 2020 despite Covid-19 restrictions. As restrictions relax, the Dialogue is planning a full schedule of activities in 2021.

Despite Covid restrictions this year, the Dialogue has pushed on with projects that could be completed under the restrictions, "parked up" others and developed new activities and strategies.

Working Group meetings have been held as scheduled via online gatherings via Zoom and a greater use of social media has been employed to ensure communications lines remain open.

The Dialogue's major projects including the Rehabilitation Principles and Commitments study of annual rehabilitation growth and the Water Accounting Framework's analysis of the usage of Hunter River water have been finalised.

Highlights of the rehabilitation report and water usage analysis are reported in this newsletter and full details of both projects can be found on the Dialogue's website at www.miningdialogue.com.au

As well, the Dialogue's commissioned study of Hunter River water quality has been finalised recently; as reported in the newsletter and online, the study found no areas of concern in terms of heavy metals entering the river system from Upper Hunter mining operations.

Following community feedback at the Dialogue's 2018 Annual Forum, the Dialogue commissioned consultants Environmental Resources Management (ERM) to analyse data to track air quality trends in the Upper Hunter compared to other NSW regions. The ERM report has now been peer reviewed by the CSIRO and published. Highlights of the study are included in this newsletter and the full report has been published on the Dialogue website.



NSW Small Business Minister Damien Tudehope (left) meets with Joint Economic Working Group members Singleton Business Chamber President Sue Gilroy, Muswellbrook Chamber of Commerce President Mike Kelly, Working Group Chair Ngaire Baker, Upper Hunter MP Michael Johnsen, NSW Indigenous Chamber of Commerce CEO Debbie Barwick and NSW Minerals Council Policy Director James Barben.

SMALL BUSINESS MINISTER DROPS IN TO DIALOGUE

The Dialogue was fortunate to meet with the NSW Minister for Finance and Small Business, Damien Tudehope, as part of a tour of the Upper Hunter in September.

Accompanied by Upper Hunter MP Michael Johnsen, Minister Tudehope was briefed on the Dialogue's projects and economic development activities with members of the Joint Economic and Social Development Working Group.

Minister Tudehope was very encouraging of the work of the Dialogue and took great interest in our work with the Singleton Business Chamber, Muswellbrook Chamber of Commerce and Industry and the NSW Indigenous Chamber of Commerce.

He also supported the Dialogue's development of the Procurement Information Hub and networking events between mining companies and local suppliers. The Procurement Information Hub can be accessed on the Dialogue's website.

Unfortunately, the Dialogue's popular School Mine Tours Program had to be parked up due to Covid-19 restrictions on school excursions and mine sites' limits on visitors.

Likewise, social distancing restrictions and bans on gatherings forced the cancellation or postponement of all events on the Dialogue's community engagement schedule. Due to Covid-19 restrictions, the Dialogue's Annual Forum has also been

postponed until 2021.

The Dialogue moved to overcome the lack of opportunity to communicate directly with the community and other stakeholders through regular news articles in local media and increasing its Facebook presence.

In 2021, the Dialogue is keen to resume its community engagement activities and the School Mine Tours Program as soon as allowed.



GROWING SUCCESS

PROJECT TRACKS REHABILITATION OF MINED LAND

Rehabilitation is a growing success story with 13,470 hectares of mined land in the Upper Hunter now rehabilitated, according to figures recently released by the Upper Hunter Mining Dialogue.

This latest figure represents a 53 per cent increase in rehabilitation of mined land since region-wide figures were first collated in 2012 by the Dialogue's Rehabilitation Principles and Commitments Project.

The Rehabilitation Principles and Commitments Project data is collated annually by the Dialogue and measures rehabilitation of mined land compared to how much land was disturbed by mining in a given year.

The project commenced in 2012 and now includes eight years of rehabilitation data. All Dialogue mining partners contribute to the data to give a comprehensive and accurate

measure of rehabilitation and land disturbance as well as other mining land use details from across the Upper Hunter.

Rehabilitation results can vary depending on the stage of operations throughout the mining lifecycle. Periods of high disturbance may be due to the establishment of new operations or expansion projects while increasing annual rehabilitation may indicate operations moving closer to the closure phase.

Rehabilitation Principles and Commitments project key figures:

- 41 per cent decrease in newly disturbed land during 2019 compared to 2018; the 2019 data shows the lowest amount of newly disturbed land in a calendar year since records started in 2012.
- While the amount of land newly rehabilitated during the year decreased from the 2018 total, the ratio of rehabilitation to disturbance increased to 89

per cent which is the highest on record. Simply put, this means for every hectare of land disturbed by mining in 2019, 0.89 of a hectare was rehabilitated.

- Total land under rehabilitation at Upper Hunter mining companies rose to 13,740 hectares; an increase of 53 per cent on the total rehabilitation figure reported in 2012.
- Land held as biodiversity offsets totals 41,803 hectares or almost twice the amount of disturbed land (22,518 hectares) while land managed by mining companies for agricultural use is 59,209 hectares or more than 2.6 hectares for every hectare of disturbed land.

For full results of the 2019 Rehabilitation Principles and Commitments project, go to miningdialogue.com.au/dialogue/latest-projects

INCREASING AWARENESS OF MINE REHABILITATION

One of the Dialogue's key roles is to improve awareness of mine rehabilitation practices in the Hunter and to highlight potential uses for mine sites once mining has finished.

Dialogue research surveys consistently find rehabilitation as one of the Upper Hunter community's biggest areas of interest.

The research also highlights a lack of community understanding of rehabilitation practices and regulations.

As well as its ongoing rehabilitation projects, the Dialogue has developed a suite of educational displays and material to help the community better understand how the industry rehabilitates mined land to suit its final use once mining has ended.

Now, the NSW Resources Regulator – which is a government member of the



Track the rehabilitation of the Westside Mine at www.bit.ly/westside-casestudy and www.resourcesregulator.nsw.gov.au/environment/publications

Dialogue - has developed an impressive online resource which allows people to view examples of rehabilitated mines.

A recently-released case study on the web site tracks the rehabilitation of Dialogue industry partner Glencore's Westside Mine.

Available on the Resources Regulator's web site, it allows users to:

- View interactive mapping of rehabilitated mines.
- View progressive rehabilitation over time.
- View drone fly overs

of rehabilitated mining land.

- Undertake virtual bushwalks through rehabilitated mining land.
- View 360 degree photography of rehabilitated mining land.

VALE - JIM MORGAN

The Dialogue extends its condolences to the family and friends of Jim Morgan.

Jim was an invaluable community representative on the Dialogue's senior working body – the Joint Advisory Steering Committee – since its inception in 2015.

Prior to joining the JASC, Jim served

on the Joint Land Management Working Group (later the Joint Environment Working Group).

Sadly, Jim passed away in October.

Jim's clear-thinking, balanced approach and genuine interest in making the Upper Hunter a better place for everyone will be very much missed by the Dialogue and its Working Group members.

