Water Supply Amendment.
Bowdens Silver Project.

Dear Sir/Madam,

Thank you for allowing me to respond to the amendment to the Bowdens Silver Project.

As you are aware from my previous submissions, my family has operated an Agricultural Business in the Lawson Creek Valley at Lue Station and Havilah for over 100 years. I believe the proposal for Bowdens to change their plan and scrap the water pipeline for the mine is outrageous. There is not enough water in the Lawson Creek valley for their plans listed in the EIS. The amendment asks for additional supplies.

The EIS and the proposed amendment demonstrate the Proponents reluctance to be an ecological mining operation. There are substantial uncertainties that may result in unexpected and unacceptable consequences. The mine will provide minimal benefit to the community or the State of NSW but the detrimental impact and cost on future generations will continue for centuries. The impact from this mine will be intolerable for the residents and landowners during the mine life and is at odds with the current preferred land usage of lifestyle, tourism, and agriculture. This is an extremely sensitive and environmentally valuable area; the ecosystem will be permanently damaged.

Further, I believe, Sections 8 of SEARS are not complete. Bowdens have failed to identify an adequate and secure water supply for the life of the project.

I have been involved in this project as a member of the Community Consultative Committee and on the Committee (now President) of the Lue Action Group for 11 years. Although there are many areas of concern around this project, the most difficult issue to solve, will affect the largest number of people and has the potential to create the largest problems is water.

The Lawson Creek Valley is not a place where water is abundant. “Lue” derived its name from “a chain of waterholes” not “a flowing river”. Lawson Creek is a reasonably reliable water source for domestic and livestock operations outside of drought times and it is the only source of water for many. All Agricultural business in the Lawson Creek Valley rely on the water fed from Lawson Creek and the groundwater aquifers that feed into it. Interconnectivity of the groundwater and Lawson Creek is well proven. Any impact to Lawson Creek will have catastrophic impacts on both business and residents. Bowdens Mine is at the top of the Lawson Creek catchment. What happens at the Bowdens site has the potential to effect the entire Lawson Creek system.

In the past we have seen some minor irrigation along Lawson Creek. All those operators, aside from a small few well downstream near Mudgee, have discontinued the practice. Although many hold water licences with capacity to carry out irrigation, water supply in the Lawson Creek Valley has proven to be inadequate for irrigation at even the smallest scale. Some irrigation plans in the past involved the capture of surface water for irrigation however the most ambitious of those at “Monivae” just 3km East of Lue was challenged in 2005 and the project plans were rejected when water licences were attempted to be moved upstream.

For Bowdens Silver to contemplate the construction of an open cut Mine and use the quantity of water proposed, it is ruthless and without precedent. In the 200 years since white settlement in the valley, there has never been such a plan to remove this quantity of water from the valley. The

amount of water proposed by Bowdens Silver will surpass the use of water by all other users in the valley put together. It will surpass this number significantly. Although Bowdens may have water licences to do so, they have no physical proof that water is there and no social licence to take it either.

Social Licence is important in this issue because it represents the community's opinion and acceptance. Is this plan worthy? Is this plan possible? Modelling may well provide possible outcomes however experience is significantly more reliable. It is crucial that local knowledge is represented in this decision.

Social License to operate Bowdens Mine is made up of three components: legitimacy, Credibility and Trust.

- Legitimacy: this is the extent to which an individual or organisation plays by the 'rules of the game'. That is, the norms of the community, be they legal, social, cultural, formal or informal in nature.
- Credibility: this is the individual or company's capacity to provide true and clear information to the community and fulfil any commitments made.
- Trust: this is the willingness to be vulnerable to the actions of another. It is a very high quality of relationship and takes time and effort to create.

During the preparation of the Social Impact assessment "Water Supply" was noted as the 3rd most frequent concern. After "Proximity to site" and "Change to way of life". In the Social assessment, Water Access and use was raised by Local Business, Residents and Landowners, Community Groups and the CCC.
The Community has been in the understanding that an external water source from the Ulan Coal fields was in the Bowdens Mine design from August 2018.
The previous proponents also proposed external water sources from places like Dunns Swamp.
Umwelt (Australia) Pty Ltd completed the Social Impact Assessment. Within the Project Information sheet April 2017, it was noted "the following chart summarizes some of the concerns that we have heard raised by community members to date as part of our engagement program. This feedback has been very useful and will further define the studies- both environmental and social- to be undertaken as part of the Project assessment process".

Surface Water, Lead and Ground Water were the three highest matters raised in objection in submissions to the EIS according to Corkery in August 2021. Total Water matters (raised in objection) raised 477 frequencies in EIS submissions and is ranked second behind Jobs (raised in support). Corkery's assessment indicates that Water is the community's primary concern.

The Bowdens Silver **Project Overview in June 2020 and Feasibility Study dated 14th August 2018** claimed the infrastructure would comprise of three principal component areas. "Water supply pipeline corridor" was listed as one of those three principal components.

SVL made clear advice in that overview that the mine design;

a. Had no major water storage on site.
b. Was building a new water supply pipeline from Ulan and or Moolarben mines.
c. No local bores would be used.
d. Initial drawdown from the pipeline would enable operations until the return water system from the TSF is operational. 1000ML in the first year.
e. Water use from onsite sources was significantly different to the unpopular proposed Kingsgate design.

In the **June 2019 Project information sheet** leading up to the submission of the EIS, Bowdens compared Previous owners Design of Water captured from local groundwater, surface water capture and other sources (including Cudgegong River) to Current design of Inclusion of a new water supply pipeline from Ulan and/or Moolarben Coal Mines.

Bowdens wrote "by ensuring access to a variety of water sources, Bowdens Silver would reduce reliance on any single water source". Bowdens also stated in their **November 2019 Impact Assessment Outcomes** "In order to maintain a regular water supply, it is also proposed to source water for the project from Ulan/ Moolarben Coals mines. As a result, the Project would place no additional demand on local and regional water resources."

Bowdens stated in the EIS "that the project was not possible without an external water supply"

A concerning theory that is shared by many in the community, is that the water supply pipeline was never an economically viable option for the Bowdens Project. They never had intentions to be ecologically sustainable. The comment by Mr Anthony McClure when warned about the difficulty of the project in 2017 was "previous owners did not know how to get a mine approved".
Those members of the community that have been interested in the Bowdens project believed that the pipeline was a far-fetched idea, many believe the water pipeline was proposed to ease community concerns about water.

This theory is based on the knowledge that,

a. little negotiation had been undertaken by the proponent with Ulan or Moolarben Coal mines for the use, purchase, or transfer of their water.
b. That water transfer from the Hunter catchment to the Macquarie catchment was far from easy and most likely not legally possible under water sharing plans.
c. That the quality of the water from Ulan coalfields was not environmentally acceptable to those along the pipeline or to Lawson Creek residents and landowners.
d. That many landowners along the pipeline were not willing to provide access and forced acquisition of easement was not a legal option.
e. There were major concerns raised by Aboriginal communities and poor studies had been done by the proponent.
f. The idea was not financially viable.

The theory was also promoted by the opinion that the social impact assessment outcomes and community backlash if the proponent initially suggested a 100% draw of water from the Lawson Creek valley would have put an end to their Social Licence. If this amendment had been released during the 2016 to 2020 drought there would have been significant opposition. Many believe Bowdens needed a safety measure on water to secure a more favorable public opinion during the Social Assessment phase. The pipeline was the safety net and, during that time, when you asked the questions about water the answer was always "don't worry, we are getting the water from Ulan".

The current theory suggests, A two-week time frame to gain public submissions in comparison to a two-month period for the EIS or a two-year assessment made by Umwelt Australia Pty Ltd is significant. I know that if I was having trouble with the most critical component of the project, which public submission or assessment I would prefer!

The theory could be seen as a cynical, but truth seems to be a hard thing to find in much of the Bowdens proposal. I believe there is no truth left in the current Social Impact Assessment and the reality is that the proponent has taken too long to prepare the proposal. They have changed their mind too many times. This has been exacerbated by an undecided design and an inability to secure a

reliable water source. In the Project information sheet April 2017, Bowdens indicated that they would finalize the EIS for submission and public exhibition and lodge with the Government in October -December of 2017. As a result of the indecision by the proponent, Data has become out of date and inaccurate. Questions about the validity of information have consistently been raised at the Community Consultative Committee. In fairness to the community, you cannot prepare a SIA if the people you are assessing don't know what you are talking about. You cannot use the opinion of a community that is based on a mine design of one type and then present another. You cannot use the opinion of a community that are no longer there, many homes have changed hands since this process began. Are these new residents' concerns not worthy?

The Social Impact Assessment reported on public sentiment about the mines effect on water quality and effect on water resources. One must ask "how was it possible for Umwelt to gain accurate information regarding the community's opinion toward the project when the information provided to that community was inaccurate?"
It must be that the information contained in the SIA is no longer correct. We must have an accurate SIA to make an informed decision.

Furthermore, the information delivered to the community about this current amendment by Bowdens is almost nonexistent. The community have received nothing. No newsletter, no open day, no consultation. Did anyone participate in the Virtual Information Session? How many? Consultation has been poor, especially when you consider the importance of the issue.

At a recent Community Consultative Committee meeting I asked;

Will Bowdens voluntarily withdraw their application until they can;

a. generate an accurate design for the Bowdens Mine Operations?
b. Consult with the community on its design?
c. Provide an accurate social assessment based on community feedback about that design?
d. Submit that Social Impact Assessment as part of the EIS?
e. Allow public submissions on the EIS?
f. Respond to those public submissions?
g. Allow for a fair and informed assessment based on truth?

All valid questions, particularly when the description of the process delivered by Bowdens Silver and RW Corkery in many of their presentations. Most recently the August 2021 Response to Submissions brochure.

The process is described as.

- Scoping including engagement with local landholders and stakeholders
- EIS preparation **including refinement of mine plans** and preparation of social impact assessment.
- Public Exhibition where the Department places EIS on Public exhibition.
- Responding to submissions where there is preparation of a submissions report that explains how submissions have been addressed.
- Assessment where the department provides its findings.

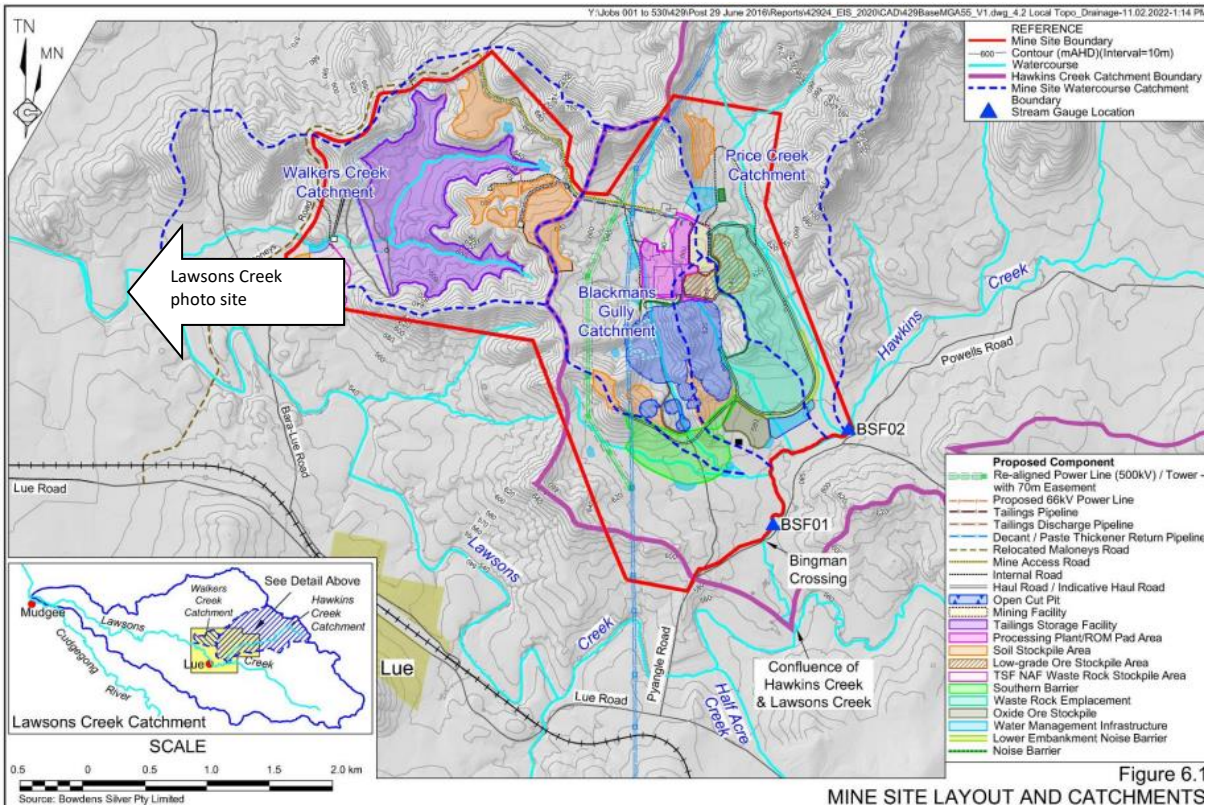
One must shake their head in wonder. So much has changed its hard to keep up. Where are we now? What plan are we up to? And how many more changes are in the future? What data is relevant to what plan? Data collected is a moment in time, what relevance does that data have to another moment in time? What question is that response to? What a mess.
How is anyone expected to trust a Company that provides such a mess?

Mr Stephen O'Donoghue from NSW Planning Industry and Environment advised the proponent in March 2022 "I do not consider the amendment to be minor". Never a truer phase could be said.

I object, in the strongest possible terms, to allowing Bowdens Silver to capture additional water over what is allowed to be harvested from their land under the Harvestable Rights Capacity.
It is unjust that Bowdens be permitted to Harvest Water from Water collected from Containment Zone, Erosion and Sediment Control Zone and the Clean Water Zone, but only call the Clean water harvested water. The total amount of water that is harvestable is 180.6ML.
One cannot just claim that water is from a dirty zone and not count that as harvested water but then pump it into the same dam. Harvested water is harvested water. Harvested water is water collected from site from rainfall or runoff. That total should be 180.8ML.
There is little enough water in the valley already.

Bowdens Silver's Surface water Assessment claims that their long-term objective is to discharge as much water collected within the sediment dams to the downstream environment to assist in maintaining environmental flows.
It is anticipated that after the settlement of suspended sediment in these dams, the water would be suitable for release in accordance with the discharge conditions of the environment protection license (EPL) for the Project which would be issued by the NSW Environment Protection Authority (EPA).
However, the new Water Management plan considers this water as retained within the Mine Site. Water collected within ESC zone dams, that is deemed unsuitable for release, would be pumped to the turkey's nest dam for use in processing operations.
This demonstrates the projects unwillingness to maintain environmental flows.

Flow rate modeling.
Flow Rate Modeling is predicted to drop in Lawson Creek by 1.2% to 4.5% during operations. Please see attached photo of Lawsons Creek in 2019 and explain where a reduction of 4.5% comes from? I would like to see Bowdens reduce the flow at this time by 4.5% and find 14ML of baseflow reduction.
The arrow on the map below indicates the location of Figures 1,2 and 3.



This truly demonstrates the Projects inanbility to secure a reliable water source.

Figure 1. Below. Taken 11th September 2019. Flow evidence in Lawsons Creek.
Although some small pools of water could be found along Lawsons Creek, Local landowners became almost totally reliant on Groundwater. This photo is clear evidence of zero runoff in 2019.
Since 1980, Lawson Creek has looked like this in 1980, 1982, 1994, 2002, 2003, 2017, 2018, 2019.
Bowdens can expect to have these occurrences 2 twice during the 16 year mine life. Depending on Climate change. If they reduce valley runoff, we will see more of this. They provide no evidence that they can accommodate for these occurrences.

The Water Supply amendment report indicates,
Baseflow Contribution During periods of no flow when remnant pools are present and where these pools are a direct reflection of regional groundwater levels, there is potential for pool levels to decline inside the area of predicted drawdown.

maximum predicted take from the Lawsons Creek Water Source would increase to 19.3 ML/year approximately 15 years post-mining.

How can the take from Lawsons Creek be 19ML when it is like the photo below?

Figure 1

Figure 2 Shows Lawsons Creek at the same location on the 6th of March 2020. Even after some good rainfall during February of 2020 the Creek showed zero flow rate. The comparison of photos shows evidence of a zero flow of water in Lawsons Creek for a period of 6 months. What is also interesting is that although there was rainfall in February of 2020 and no groundcover there was still no runoff. The rainfall was very gentle. None of it ran off. There was no surface water runoff to Lawsons Creek or into local dams.

Figure 2

Figure 3 Shows it was not until 4th of April 2020 that there was any significant change in flow rate. Lawson Creek flowing due to a heavy downpour. Runoff was created by intensity of rainfall. There is a point where rainfall absorption into the soil reaches a tipping point. This creates runoff.

Figure 3

Terrestrial Ecology.

No specific data is presented about the Koala colony in the mine area. More Koala were sighted at Bingman Crossing on the 22nd of March 2022. Details of recent Koala sighting in the area are show in the chart below.

KOALA SIGHTINGS – (MWRC Area). Most are in the Lue area.
Collated by Mick Boller – Ph: 0427401102
24th March 2022

Date of Koala sighting	Person who saw the Koala	Email contact/phone number	Location. Property, road etc	Are there any Photos?	Has Dr. Kellie Leigh (Sydney Uni) and MWRC been notified
Pre 2014	Jane Ireland		Near the "Bowdens" gate on Bara Road. This sighting was reported by Jane Ireland to a "Bingman Landcare" meeting.	No	No
March 2014	Kurtis Mills		Long Gully, "Glendos". Powells Road LUE	Yes. Six (6)	Yes. 1/4/2014
2014	Ross and Tina Lomax		Close to family home. Bylong Valley Way. Austrian Exchange student present. Confirmed with Ross by phone 24/10/2021	No	No
24/11/2014	Sue Pridmore		The Badger Ground		
December 2016	Sue Pridmore		The Badger Ground		
July 2017	Unknown. FB post on MVH.		Cooyal. Injured Koala was transported to Mudgee Vet Hospital. Facebook post.		
15/2/2018	Sue Pridmore		The Badger Ground – 500m from house		
20/12/2018	Jayne Bentivoglio		190 Mossy Rock Lane, Monivae. Opposite Eastern Olive Paddock		
November 2017	Ms. Fekkes Tom Combes, MHS Farm Skills Mick Boller		Pyangle Road, near "Rosewarnes" gate and the "Bingman" log. This sighting was beside the road which runs between two SVL owned properties "Rosewarne" and "Bowdens".	Yes. Photos and video	Yes.
31/10/2018	Jack White		Bara Road, off Havilah Bridge entrance.		Yes
6/7/2019	Mick Boller Maureen Boller Tom Purcell (SVL)	0427401102	Goorari, 261 Powells Road, Lue. In large ironbark tree in the cattle yards. Reported by phone to SVL. Observed by Tom Purcell.	Yes	Yes.
November 2019			Lue. Private residence North of the Fire Shed.	Yes.	
November 2019	Peter Krull		Between "East Havilah" entrance and Railway Crossing	Yes. Five	Yes
2021			Lue Road, near Dolomite Road turnoff. Koala warning signs erected before and after the Dolomite Road exit.		
21/8/2021	David Poole		Keouville Ramp on Maloneys Road. Koala carrying young. Property owned by SVL. The photos were supplied to B. Hjorth and T.Purcell (SVL).	Yes. Six	Yes
15/9/2021	Sue Pridmore		The Badger Ground. Shed	Yes	Yes
October 2021	Mal Stokes		Ferntree Gully, off Bylong Valley Way. Photos and video.	Yes	
October 2021	Eaglestone Farmstay		320 Breakfast creek Road. Facebook post with photographs.	Yes	No
October 2021	Derwent family. Steve and Cherie		Reedy Creek Road. Ross Lomax (telephone 24/10/2021 mentioned "a colony")	No	No
22/03/2022 and again on 24/3/2022	Joel Statham Rowan Mills Maureen Boller Mick Boller		Red Gum tree closest to Bingman Crossing on Lue side of Hawkins Creek. Photos taken by Maureen Boller and Mick Boller. SVL informed by phone by Maureen Boller (To B.Hjorth and T.Purcell).	Yes	Yes to KL **Paper report + photo to MWRC**

2.2 The information in this report is Inaccurate and out of date.
The reality is that resource demand for Silver is decreasing. The Australian Renewable Energy Agency is funding Australian solar panels that use Copper instead of Silver. As the Solar Industry evolves and the industry moves to higher efficiency next generation solar panels which require two to three times more silver, there is a drive to reduce costs and use more abundant materials. Copper is only marginally less conductive than silver (5%), significantly more abundant and safer to mine. 20% of world silver production is used in Solar Panels. Analysts predict the demand for silver will decline not increase in the future.

SVL Market Cap now sits at around $300 m at 23.5 cents per share. SVL have been down as low as 18 cents per share in the last 12 months with Market Cap of approximately $232 m. That is approximately 40% below what was reported in the EIS. SVL has a highly volatile share price that is indicative of the volatile price of Silver.

2.3 Economic Context. When was this data obtained? 2020? The world has changed significantly since then. Current demand for labor in the Mudgee region has outstripped supply.
The comment that there are strong indications of the need for environmentally and socially sound projects is correct. The Bowdens project is neither of those. 905 of all submissions raised during the EIS were about Employment and did not come from the Local Lawson Creek community. 69% of Lawson Creek submissions were in objection. Those objection submissions focused principally on Environmental and social issues.

2.5. Land use. Bowdens have grown and planted agricultural crops on their land and on mine site areas. The assessment describes the project site as having no Strategic agricultural land. I believe this assessment of the value of the agricultural land at Bowdens is inaccurate. Bowdens run cattle, sheep and cropping enterprise on the agricultural land at Bowdens. What reduction in agricultural potential will occur due to mining? The Maloney family ran a successful Agricultural enterprise on Keoville. Now owned by Bowdens that will be underneath the proposed TSF. The current cropping land will be under the WRE.

2.7 Supply considerations.
How is it possible to claim there has been no consideration to directly source water from Lawsons Creek when their studies show a reduction in flow and a reduction in runoff into Lawsons Creek of up to 4.5% ? and a post mining reduction in creek flow of 19ML.
What does that mean? We don't want to, but it will happen anyway!

3.2 table 3.1 directly contradicts previous tables.
135 megalitre dam is massive. Bowdens originally claimed "no major water storage on site" this dam will be approximately 45 times the size of a large farm dam. There are two of them on the new mine plan plus 6 other harvestable rights dams and many leachate and sediment dams.

Table 3.2 is suggesting a 130ML Turkeys nest dam and a 130ML water storage dam?
Figure 3.1 the scale of the dams in the figure is misrepresented.

Containment dams and geochemical testing is still underway? Why is it not complete?

Sediment dams total 135 of stored water. Add this to Harvestable rights dams of 144.8 ML plus 130 of Turkeys nest dam and 130ML water storage dam is total 539.8 ML of Dams. Plus the TSF.

Harvestable rights total only 180.6ML however Figure 3.3 shows Runoff and rainfall use of up to 953 ML per year. Table 3.5 indicates Average water balance of 856 ML per year. There is no explanation of water rights and licenses that correlate with these tables.

3.3.1 Dust suppression is grossly underestimated. There are no provisions for drought. What are the variations of water use, equipment, economic cost, equipment use and noise from changing seasons?

Potable Water. The water tanker is not listed in the vehicle movements table. 14 meg is approximately 933 15,000 litre truck loads. 18 per week. There is no reference of where the potable water coming from until the return osmosis plant is constructed.

3.3.3 Shows no provision for Drought. 856 ML annual is a massive capture. 2017 to 2020 drought delivered almost zero runoff. What is the scenario if runoff is reduced by 70% over three years as it was in 2017, 2018 and 2019? What are the site water balance solutions in this situation? These charts show a 15% reduction from Average to Low or High. All my Dams were dry by April 2019. All these dams were only used for stock watering purposes. Not irrigation or pumping. Large amounts of water were lost to evaporation and seepage.
2019 rainfall at Lue was 27% of the annual average at Lue. There was no effective rainfall to create runoff.
2021 Rainfall was 30% above average.
2022 rainfall is currently well above average however effective runoff is very low due to groundcover.
What is the plan here? The High and Low scenarios are not comparable to the local rainfall charts.

6.2.2.3
This mine project has been in planning for over a decade but there is no site-specific long-term data to characterize streamflow in Lawsons Creek and Hawkins Creek. Lue is not Rylstone and Hawkins, and Lawson Creek are not the Cudgegong River. They are significantly different. Both Hawkins and Lawsons Creek do not flow permanently.
The assumption that the low flow rate of Hawkins Creek compared to rainfall is attributed to a couple of farm dams is incorrect and without knowledge. It is well documented that runoff and Flow rates are caused by groundcover and intensity of rainfall. Farm dams fill and then overflow. They do not contribute to long term reduction in flow rate unless they are used for irrigation. Please show evidence of these dams and that they reduce flow rates?

Figure 4 (taken in November 2019) and Figure 5 (taken Novemeber 2020) demonstrate the contrast in Groundcover (grass) at Lue which contributes to changes in runoff rates. Figure 4 acts like an iron roof. Figure 5 like a sponge. Add this with rain intesity and slope of terrain to deliver a calulation of accurate level of runoff. There are no tables within the assessment that cater for these changes in local rain intensity, ground cover and slope.

Figure 4

Figure 5

Flow Data.

Why is there is no actual flow data for Lawsons Creek? After all these years of data collection there is no flow data for Lawsons Creek. This is the most critical watercourse in the site plan and there is no actual flow data. This is total incompetence by the proponent. What have they been measuring?

The flow rate of Hawkins Creek is measured at 1.7% of Rainfall but then the flow of Lawsons is calculated at 4.9% of rainfall. What are the reasons for the difference?

6.2.2.4
These comments are inaccurate. Irrigation is not possible from Lawsons Creek. See Figure 1 and estimate the irrigation capability at that time. There is not enough water. Licenses may be held but are not used. There is no irrigation occurring downstream of the Mine site at Bristowe, Lue Station or Havilah as suggested in the report.

Runoff Interception.
Is estimated at 177ML a year. Table 3.6 indicates a 740 ML rainfall and runoff.

5.3 Community Feedback.
The falure of the propoent to deliver consulation is overwhelming. There was no direct feedback from the Virtual information.

There are aspects of the table below that are inaccurate. Water infrastructure is not correct as leachate dams will be used for water capture. There are no totals of Dam size.

Project Component	Previous Ownership	EIS Design	Current Design
Total Resource	Mining of 53 million tonnes of ore and 79 million tonnes of waste rock.	Mining of 30 million tonnes of ore and 47 million tonnes of waste rock.	Unchanged from EIS.
Processing Rate	Processing of 4 million tonnes per annum of ore.	Processing of 2 million tonnes per annum of ore.	Unchanged from EIS.
Water Use	Water requirements averaging 3.5GL per year.	Lower water requirements averaging 1.9GL per year.	Water requirements averaging 1.2GL per year.
Water Source	Water sourced from local groundwater, surface water and other sources (including the Cudgegong River).	Water sourced from groundwater and surface water recovered from within the Mine Site with make-up water supplied by a pipeline from the surplus water within the Ulan Coal Mine and/or Moolarben Coal Mine.	Water sourced from groundwater and surface water recovered from within the Mine Site with make-up water supplied by on-site production bores.
Water Infrastructure	Large water storage dam (3 500ML capacity) required for water capture and storage.	65ML turkeys nest dam planned to store water from pipeline. Advanced dewatering bores to support site establishment and construction only.	Advanced dewatering (production) bores, enlarged turkeys nest dam (130ML), water storage dam (130ML turkeys nest) and six harvestable rights dams.
Ancillary Mine Infrastructure	Infrastructure located closer to Lue.	Relocation of processing plant further north, away from Lue.	The Processing Plant Area is unchanged. A paste thickener plant has been included for increased recovery of water from tailings slurry.
Personnel Accommodation	Construction workers accommodation within the site.	No on-site worker accommodation with all accommodation to be sought locally.	Unchanged from EIS.
Open Cut Pit Scale	A single open cut pit covering approximately 73ha	A main open cut pit and two satellite open cut pits, collectively covering approximately 52ha	Unchanged from EIS.
Tailings Storage Facility	TSF located to the east of the Open Cut Pit within the Price Creek catchment over an area of 181ha and with a capacity of 46 million tonnes.	TSF located to the northwest of the Open Cut Pit within the Walkers Creek catchment over an area of 117ha with a capacity of 30 million tonnes.	Location and design philosophy unchanged however, area of impermeable liner has been increased to reduce seepage potential. Floating decant recovery infrastructure replaced by fixed pumping to increase water recovery and reduce losses from evaporation and seepage.
Mine Site Access	Access via a realignment of Maloneys Road that intersects with Pyangle Road with traffic entering Lue Road to east of Lue.	Access via a realignment of Maloneys Road that intersects directly with Lue Road to the west of Lue, resulting in no mineral concentrate transport through Lue or Rylstone.	Unchanged from EIS.

7.6.2.12
Hazards
What are the bush fire management measurers? No consultation has been carried out with Lue Havilah RFS.

Economic Considerations.
Where is the evidence? Rental properties are nonexistent in Mudgee, Lue and Rylstone right now. Only 15% of employees from out of town. That is not accurate. There is no assessment. Their comments are speculation.

Visual Impacts. The map of the mine site shows the height of the TSF wall to be 620m, The height of the WRE to be 670m and the Moved powerlines to be on top of Bingman Hill at 620m rising to 680m. Bingman Hill is the highest point shielding the view of the project from surrounding properties but only stands at 620m. The WRE will be 50m higher, the TSF the same height but not shielded and the Power lines Cleary visible. How can Bowdens claim their will be no visual impact? My home is in view of all these sites. There is no mention? Why not?

If the Tailings moisture level is decreased, the potential for dust off the tailings dam will increase. There are no plans for management of tailings dust. What will prevent contaminate TSF dust from blowing directly over Lue during normal NW winds. How will the tailings dam remain moist to prevent dust?

I believe there will be seepage issues from the Leachate management dams and sediment dams. These dams do not have the same seepage measures as the TSF. Nor do they comply to the recommendations from the EPA report.

The Assessment claimed “Predicted peak flood depths along the overbank areas of the Hawkins and Lawsons Creek tributaries are generally below one metre for events up to and including 0.2% (1 in 500) AEP. Peak flood depths of up to 1.5 m for the PMP design event are predicted in some sections along these tributaries.” This assessment is inaccurate. There are no flow records to substantiate these assessments. My experience is that Lawsons Creek flood depths along the over bank regularly exceed 1.5m.

Key points regarding flood flows are conjecture. There are no flow rates for Lawsons or Hawkins creeks to validate the modelling.

There is no reference to the current harvestable rights dams already on the property. I am aware of several original dams. There is no reference to them in the table of harvestable dams on the property. Bowdens Claim they will continue agricultural operations on the property. There is no reference to where the water will come from to continue to undertake agriculture.

Bowdens claim they have no intention to take water from Lawsons Creek why is there mention of use of their Water Licences on Lawsons Creek later in the project?

Total storage according to table 3.10 page 23 Water supply amendment report demonstrates 5123ML of Maximum Modelled Stored water volumes but they claim no major water storage on site. Please explain?

Table 3.10
Maximum Modelled Stored Water Volumes

Dam	Nominal Design Capacity (ML)	Maximum Modelled Stored Water Volume (ML)
TSF Decant	Varies	3 340[1]
Pit – final year	N/A	1 157
Pit - prior to final year	N/A	387
WRE leachate management dam	80	60
Oxide ore dam	9[2]	9
Processing plant dams	100	95
Other combined sediment dams (modelled as containment structures)	80[2]	75
[1] Occurs during Year 8 [2] Excludes sediment storage		
Source: WRM (2022) – Table 5.6		

Project description claims 322ha of the seven principal components within the mine site. I believe the project is double dipping on water capture by retaining all the water from this area but also including it in their harvestable rights area on the property. I would have thought that harvestable rights must be removed. Please explain?

6.3.4.4 Water supply amendment report. Figure 6.9.
Groundwater Drawdown lines are incorrect. The numbers on the isobars that indicate the level of drawdown do not match.
This figure indicates considerably more impact on Lawsons Creek. The isobars cross Lawsons Creek considerably more times than what is indicated in previous models. This model indicates a 1 meter draw down of Lawsons Creek at 8 locations right near the Lue Village. There are no provisions or suggestions as to where an alternate water source will be provided to the people or properties when their water is affected.
Furthermore, traditionally, water is sourced from Lawsons Creek during bushfire. What provisions are the proponent making for bush fire water security when they affect the level of Lawsons Creek at these locations? Bushfire generally occurs during the drier times. Remember the Black Summer fire season and its preceding rainfall.
The drawdown models indicate a significantly drier mine site. What fire mitigation methods are being employed to prevent and control fire due to the drier area? Draw down levels indicated on figure 6.11 show a continued drier area for 50 years post mining. What fire mitigation processes are in place for post mining? Who will manage the site?
The outer isobars on figure 6.9 indicate a significantly increased impact to the north of the site. This is pristine bushland but there are indicators that the Flora or Fauna will be affected.
The report states “terrestrial groundwater dependent ecosystems may potentially deteriorate due to reduced water access”.

Bowdens pledges to “make good” any impact to local bores. What provisions have been made and where will the water come from if the proponent must “make good” from their actions?
Will the project “make good” on impacts to the dependant ecosystems? What measures will they take?

In conclusion, I see a significant number of errors within the amendment and my concern is that much of the assessment has been made without the use of actual data. This has resulted in an assessment that is at odds with what those living in the Lawson creek valley have experienced and witnessed. There are a substantial number of unanswered questions and conflicting views.

I believe this is driven by the inability of the project to secure an economically viable and reliable external water source. The ability to secure this reliable water source has always been one of the major hurdles of the project. One must ask “if the water was always in the Valley, why didn’t they just get it from here in the first place”? The reality is that the water was never here, it is not reliable and not an ecologically sound decision. However, subsequently, finally and in a last-ditch effort, the project has been left with no options and been forced to produce a reckless plan that leaves considerable doubt and probable unreasonable impact to the people and environment within the Lawson Creek Valley.

Of course, I object, and I ask those responsible for the approval to reject the application.

Yours Sincerely,

Tom Combes.