

This Review has been submitted as relevant to the OMPS (Oven Mountain Pumped Hydro Project)- and is written in response to their Environmental Impact Statement.

Compiled by a concerned citizen that will be impacted by the OMPHS.

THIS STATEMENT IS MADE OUTSIDE MY SUBMISSION BELOW, REGARDING PERSONAL INFORMATION IN THE EIS THAT I BELIEVE HAS NOTHING TO DO WITH THE PROJECT.

I am not convinced that the OMPHS has acted in accordance of the privacy laws in NSW and Australia by publishing the personal details of many people . This occurred because the OMPS interviewed or spoke to many local people, with whom it looks like they had confidentiality obligations.

The number of those effected is possibly over 50: including their personal phone numbers, email addresses, address, vaccination status, insurance cover, records of their phone conversations, copies of emails (some clearly showing they may contain confidential information and was for the recipient only), when people are to be paid and possibly more.

.

This material was published in the EIS and also on thumb drives that were distributed.

This was published in AppK which is 800 pages long and being so large most people would have downloaded it so it will be hard to trace where the information turns up.

Many of the people whose privacy has been compromised are Aboriginal people, some I know personally, and I am sure they do not want their details

spread in possibly thousands of directions and downloaded on to many hard drives and Clouds.

There was also an image that I think should not be published the person could easily be an ancestor of people now living in the area. The image had nothing to do with a power project and was of a bare-chested female.

I notified the OMPHS when I found it and also the Planning Dept on 11 October 2023, this was 3 weeks and one day into a 28-day response time. I cannot believe I was the only one that picked this up and reported it, I was told that the information was produced by a consultant.

The Planning Dept said they would take it down from the publicly accessible website. I do not know if my private details were published, as I had attended meetings with the company at both Kempsey and Willawarrin and had given the company my contact details.

I did receive an email from them last week so they still have my email address. It is impossible for me to go over the many pages of the document to see, I have struggled with the 940 pages of Appendix O and 800 pages of Appendix K which are part of the EIS.

Also of concern is the probability that the personal details in the EIS will be passed on to another country where protection by law may not be as strong as in Australia.

I request that an extension be granted for submissions because of the enormous amount of material to be sifted through, before the due date and a day lost due to a public holiday, many have taken holidays over the time due to school holidays and the distraction of the referendum could be argued for reprieve. I personally have struggled doing research, backing up my statements with proof and

completing this because of the enormous number of pages in the document. I consider my submission incomplete because I have not read the EIS completely and nobody could in the allocated time.

OVEN MOUNTAIN SUBMISSION SSI-12422997

Preamble

I have concerns for the way the EIS was conducted and published, especially regarding the local Aboriginal population many are known by me, and I have taught their children as I have been a schoolteacher at Bellbrook and Willawarrin. I have a relative living at Bellbrook. I have made a separate statement above regarding personal details of predominately Aboriginal people and an image of one that have been published in the EIS.

I am putting in this submission regarding the Oven Mountain Scheme (OMPHS) because I am a local to the area and will be impacted by road noise and road traffic. I have a historical interest in the area as my great aunt and great uncle lived on Long Flat station where they were married and another aunt and uncle lived at Riverview, my great grandmother also lived on Long Flat station for a time when the area was involved with mining, timber and livestock grazing

I have had experience working on similar projects that involved tunnels, power stations and dams and spillways. I worked over the Macleay gorge at Hillgrove underground mine producing Antimony, I worked as a concrete batch plant operator at Glenbawn dam and worked in the construction of Bayswater Power Station.

If there are to be any benefits from the project, I would like to see local communities benefit from them, I know most of the kids in the area and many parents as I have been and still am a local School Teacher. It is very disheartening for people to see company vehicles drive past them when they know the occupants have come from far away and there will be a safety concern regarding the road. I have not seen any job vacancies on the community notice blackboards at Willawarrin or Bellbrook. I saw several vehicles travelling through Willawarrin on 14 October at about 9 am and turn down the road towards the site.

1. Local community and local Aboriginal involvement and consultation.

Many Aboriginal people will lose all respect and trust for OMPHS when they find out that their personal details have been shared far and wide in the published EIS.

It is hard to win over the trust of people that have been there for thousands of years. Trust can be lost in an instant.

A lot of Aboriginal people are skeptical of people that appear to be dominant and possibly the easiest way to prove that is turn up in a new shiny Landcruiser or similar and expect people to come to them.

A more respectful way to consult with an Aboriginal community would be to ask them if you have permission to stay on their land or Country, this could be just renting a house or old shop or similar in Bellbrook and gradually people will come and talk not just a prearranged place and time. This is a slow but productive process.

The OMPHS employed an Aboriginal Liaison officer or similar which is great but the only problem he was working off Country.

The arrangement of a shopfront in Kempsey in a large building would be daunting for many. The shopfront had limited opening hours.

Did OMPHS have permission to remove certain artifacts from the site where they were found which obviously happened and were they correctly replaced? They were obviously removed for study purposes.

Putting small advertisements in newspapers doesn't work if you don't get the paper or it is unavailable or you don't read.

Spending money on things such as the show is excellent, but did OMPHS physically help out what have they done for the communities.

There are still places needing cleanup after the fires, if OMPHS can move mountains they could have helped out and gained support of the locals.

The area around the OMPHS did suffer badly from the fires and if they were genuine in being involved with the community they could have helped with fodder or had teams working for Blazead. Now there are starving livestock in the area and if OMPHS were genuine community members they would be buying and distributing hay.

Having drop in centres is not always good in isolated areas, I have been to Willawarrin when one was on and few attended. Some possible reasons human nature says be aware of strangers. People do not like to turn up on the terms of others for example meeting will be held on such a date and a time, does this suit locals, were the locals given the opportunity to organize a time and place etc. I clearly remember telling the OMPHS people there that if they like to be accepted they should stay in the local pub, and the Aboriginal liaison officer should be working on Country, they didn't on both counts.

Spending money and being accepted are 2 completely different things.

Are there any jobs being created now that the drilling rigs are returning or do the workers just come, earn good money and spend it elsewhere? Please see below a screenshot about an ABC report on the Dunghutti Elders (Kempsey) and their opposition to the Project. The story should be still available on their website. I did not contribute to it.



The ACHA identified 19 sites which could be adversely affected and of these 12 could be completely or partially destroyed, this is not acceptable.

If we look at this differently what would happen if I went to a town park and destroyed or damaged 12 out of 19 statues or 12 out of 19 paintings in an art gallery.

2. a Historical information timber Information in EIS is different to historical published. Please refer to 2 images below (fig 1 fig 2) the OMPHS doc below from Appendix K p54 states that logging started in 1946 while newspaper cutting describes cedar cutting from 1835. Another part of EIS states that cedar was cut from 1820 to 1830. The EIS information was conflicting. The area has had many sawmills over a long period of time. More research has to be done if the correct time and production needs to be calculated. Please see the attached newspaper articles from the time.

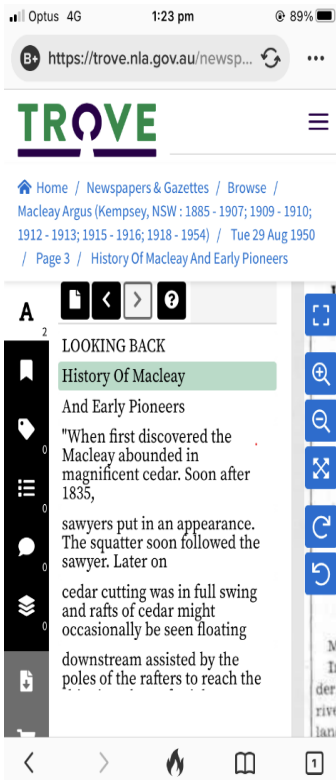


Fig 1

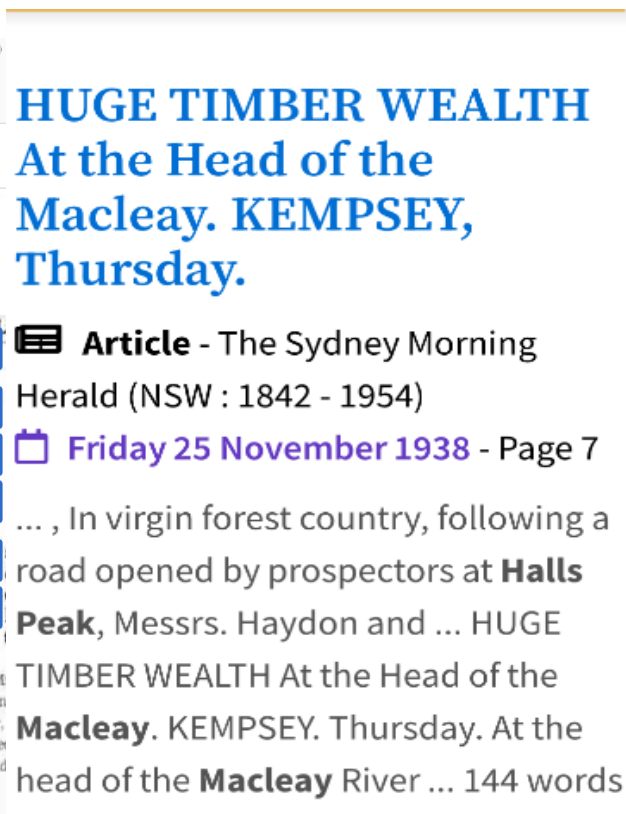


fig 2

Mining activities have also occurred periodically within the vicinity of the Project area. The first record of mining in the region states that copper ore was discovered at Willi Willi, south-east of the Project area in 1891 (Carne 1908). Vigorous mining efforts to extract silver, copper and primary ores occurred at Willi Willi and the surrounding areas over the next two decades with mining activities ceasing in 1909 (Daigle 1993, p.2). Gold and tin were also periodically mined along the various creeks of Carrai (to the east) and near Hillgrove (north west of the Project area) over the late nineteenth and early twentieth century (NSW National Parks and Wildlife Service 2008, p.11). The Carrai miners transported minerals and ore to the Macleay River by mule via the Landers Ridge trail. Mining activities resumed in the 1960s and substantial amounts of gold were recovered from around Carrai (NSW National Parks and Wildlife Service 2008, p.11); and as recently as 2019 mining still occurs at Willi Willi.

Commercial logging in the region commenced in 1946 and reached its peak during the 1960s, which helped support large logging towns such as Daisy Plains and Kookaburra. Selective logging is currently undertaken in the Project area particularly in the southern part around the PHGW. Historical aerial imagery from 1956 (Appendix C) shows large remnants of forest east of Macleay River had been cleared – effectively areas in close proximity to the Macleay River upon which cedar was transported. However, historical aerial imagery extending into the late 20th Century reveals little change from 1956, with increasing regrowth of formally cleared areas and localised tracks.

Fig 3 from AppK p 54 above

2b Historical information mining.

The above states that mining started at Willi Willi as the first mine in the district. This is not correct, there were many mines started before then and mining did not cease in 1909 as stated above. The Munga creek mine producing antimony as well as other toxic metals closed in 1974 and it produced the highest quality antimony in Australia at the time.

There was an antimony processing works at Coringula on the river near Kempsey working in 1880 and they processed antimony from Hillgrove for a while.

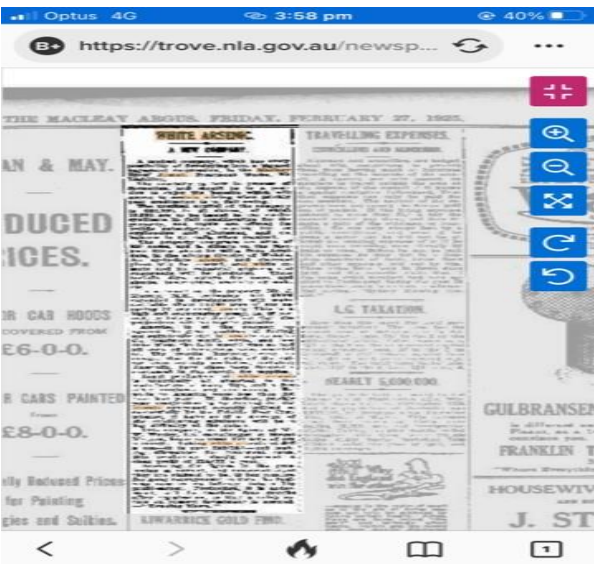


Fig 4

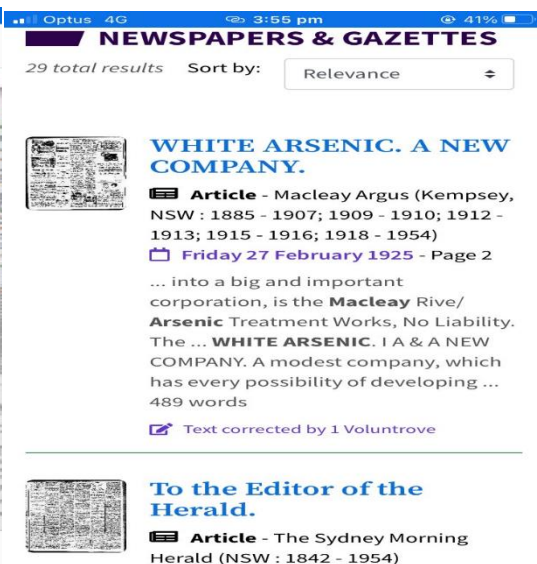
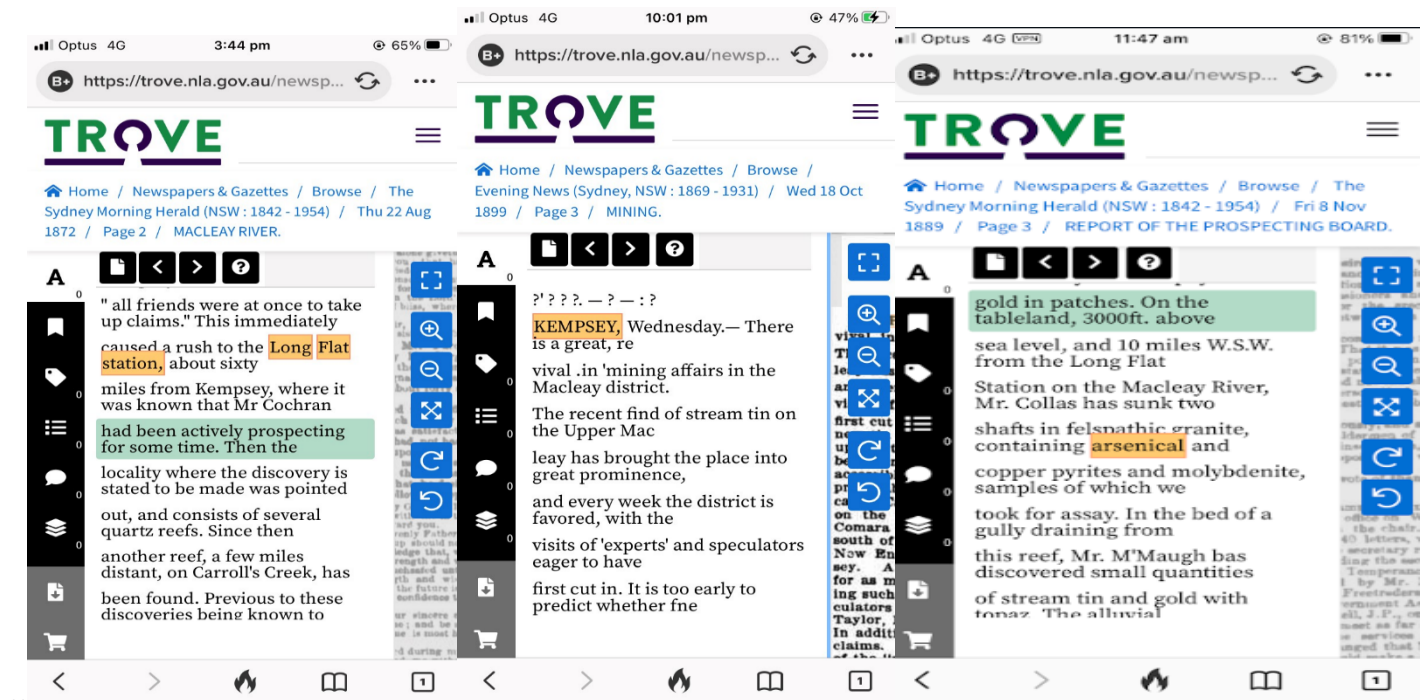


Fig 5 first part of fig 4.

The proposed White arsenic plant was to be built on 320 acres on the Macleay river at Georges junction the clip above is dated feb 27 1925 and mentions 20,000 tons of ore available there. There is a major concern that if this is to be disturbed in any way it may result in the pollution of the river. Now Bellbrook village is getting its water supply trucked from Kempsey due to previous pollution at Bakers Creek (EIS) but also the large mining operations that were conducted at Hillgrove. The arsenic is still there and many other locations near the project. There was another attempt to start up a company to extract arsenic about 10 years later but it did not succeed, probably due to the depression and lower demand for arsenic as a weed spray and sheep dip, the arsenic still is there. Some of the hundreds of newspaper references are listed below regarding early mining and exploration.



1872 fig6

1899 fig 7

1889 fig 8

KEMPSEY MINES PLACES £300,000 OF SILVER-LEAD ORE EXPORT TO ENGLAND
Article - Macleay Argus (Kempsey, NSW : 1885 - 1907; 1909 - 1910; 1912 - 1913; 1915 - 1916; 1918 - 1954)
Friday 20 February 1948 - Page 4
 ... -lead ore from their mines atf **Halls Peak**, on the Upper **Macleay** about 80 miles from Kempsey. It was ... 221 words

THE QUEST FOR GOLD N. Coast Mineral Resources (Article 10.--By H.J.B.)
Article - Northern Star (Lismore, NSW : 1876 - 1954)
Saturday 27 April 1935 - Page 12
 ... should be a sound investment. SILVER— LEAD Silver — lead ores have been recorded at **Hall's Peak**, Nambucca COPPER Copper bearing ores have been recorded from Long Flat, **Macleay** River, Styx Riyer and **Halls Peak** ... 1751 words

Fig 9 and 10 1948 and 1835

There were many previous mines in the area some lasted for many years, there were many in the OMPHS area including gold, antimony, arsenic, copper and tin. For example, copper at Long Flat. A map on the EIS indicates numerous zinc deposits but these are not found on the Dept of Mineral Resources maps which have numerous tin mines as well as more findings of antimony and Arsenic.

A very large mine over the river to the project at Halls Peak produced many thousands of tons of silver and lead ore, lead being particularly toxic. A lot was trucked to Kempsey through Georges Junction.

There are many reports of copper towards Jeogla and a farm owned by my family is named Copperocks at the top of the "Big Hill" on the Armidale road north of Georges Junction.

Mining was stopped or put on hold not because the ore ran out but because of economic reasons. The Ore is still there.

Summary The Macleay valley has a long history of mining and unfortunately several ores have been toxic, the project area covers many of these old mine sites and they may be disturbed during workings, and many are not known. Toxic ores have been found on the site, to the north, to the east and to the west. What will happen if a toxic substance is found? It would probably be impossible not to uncover existing outcrops with groundwork which will include moving millions of tonnes of material.

At present the village of Bellbrook relies on water being trucked from Kempsey because of Arsenic in the river. Any disturbance of arsenic ores could cause dramatic changes in the river and hence Kempsey water and farmers. Kempsey relies on water from the river and there was a time when Kempsey came close to having water bought in by train.

There have been many publications regarding timber and mining in the Upper Macleay, a lot are available in the Kempsey library, there is a book about a local character known as Cedar Haydon and there are publications on the numerous tin mines in the area. It is very easy to find historical records of timber and mining.

The EIS did not show the full extent of historical mining and the 20,000 tons of Arsenic are still at Georges Junction.

Source: EMM (2022); DPM (2021); GKS (2017); GA (2011); CMPS (2020), CP (2001)

Scale: 0 1 2 3 4 5 km

Geological map of the Owen Mountain Pumped Hydro Energy Storage Project area. The map displays the project area (pink outline) and various geological features. Key features include the proposed reservoir footprint (blue hatched area), proposed subsurface infrastructure (blue lines), and various boreholes (yellow squares). The map is color-coded by geological period and formation: Permian (Pnpx - Permian, Parrabel bed; Pgcd - Permian, Carral Granodiorite), Carboniferous (Pnck - Carboniferous; Pnpt - Carboniferous, Pee Dee bed). A key on the right explains the symbols and colors. An inset map in the top right shows the project location within a larger regional context. A scale bar at the bottom indicates distances up to 5 km.

KEY

- Project area
- Named watercourse
- Watercourse/drainage line (refer to inset)
- Hydrogeological borehole
- Geotechnical borehole
- Proposed reservoir footprint
- Proposed subsurface infrastructure
- Geology (SMEC 2022)
 - Homfels
 - Meta-siltstone
- Historical data - Commodity detected
 - Antimony
 - Arsenic
- Historical data - Elevated metals
 - Antimony
 - Copper
 - Zinc
- Geology 150k period and formation
 - Permian
 - Pnpx - Permian, Parrabel bed
 - Pgcd - Permian, Carral Granodiorite
 - Carboniferous
 - Pnck - Carboniferous
 - Pnpt - Carboniferous, Pee Dee bed

Desktop review and sample selection

Owen Mountain Pumped Hydro Energy Storage

Material characterisation

OMPS Pty Ltd

Figure 3.1



11

At Peach Tree creek there was a shaft that found Gold and Arsenic at about the exact site of the top dam data sheet 845. Site 846 shows Gold, Silver and Arsenic. Arsenic was also recorded at 848 and 849. Antimony at 850 and copper at 851. Many others not recorded or logged into Mines Dept at the time because secrets were common to where the mother lode is. The department of mineral resources information is easy to find, and it is all verifiable.

The Project map shows zinc while the Dept Mineral Resources maps show significant finds of Tin especially immediately to the south and east of the top dam. There have been books written about the Tin mines in the area and there are still many holes in the ground.

The combined maps show significant mineral deposits. Original Dept Mineral Resources 1992 map below.

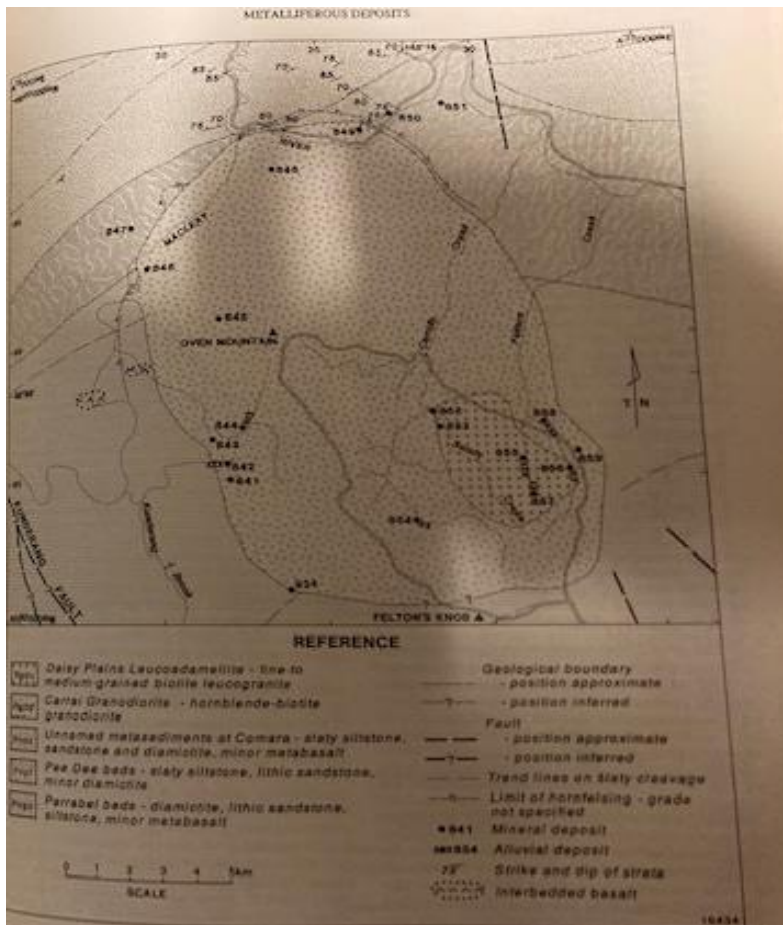


fig 13 Dept mineral Resources Mineral Map of Project

area.

Summary There are significant mineral deposits in the area, and they all need to be found and identified before any earthworks take place. The true indication of minerals would be the accumulated information from several sources which would indicate more than one map for example, and many are unknown because the old miners were good at keeping secrets.

5.Geochemistry concerns

Incomplete information.

The cross section given below shows an incomplete drill, it stopped at about 400m , should the drill go down the whole depth because it is a mystery what may be under it. At about the site for this drill hole was a shaft dug which produced Gold and Arsenic, see map above.

Is it possible that Arsenic could find its way down and enter the dam below and increase every time the water is cycled thus building up. The same hole struck water at 71m is this contaminated?

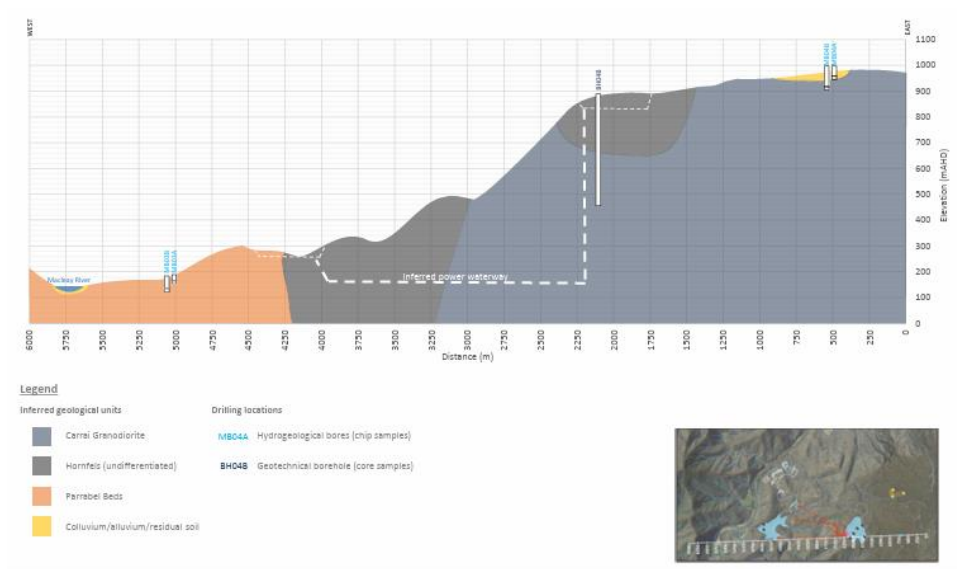


Fig 14

What are the concerns if the tunnel or drill hit an outcrop of antimony or arsenic? Or fracture going through 2 faults in the rock?

The tunnel will move and expose more minerals than a thousand bore holes which are very hit and miss. I personally have been working in a tunnel and suddenly you will come across a large outcrop of antimony and gold while following a fault or very small seam of ore.

Will the drilling be completed after the EIS closing leaving unanswered questions? Or will another EIS have to be published.

Peach Tree creek would 'drawn down' (from EIS) the tunnel in times of rain and could this also be source of contamination.

I know from my own experiences working underground in Hillgrove mine that when it rains a lot of water finds its way through the fissures and cracks in rocks and carries with it dissolved minerals. We would get wet several hours after it started to rain “up top”. As the water goes round and around it may progressively become more contaminated.

The number of bore holes is of concern, if you have a few holes, you will probably find nothing the more holes the greater the chance of finding something. From my experience the toxic ore antimony is usually found in vertical seams within the rock and from my experience it is from 100 to 500 mm wide and always bending in a gradual curve. You would be very lucky to strike it with a bore hole.

The chances of finding anything with a few bore holes is very low compared with say building a road up a steep mountain that has a fault line on in it.

5. Pollution

This is of a concern especially in relation to water and the long distance the Macleay flows supplying human, animal and farm water. Bellbrook water mentioned above.

There have been numerous accounts of arsenic poisoning over a period of over 100 years in the Macleay catchment, a recent example would be a farmer losing 4 head of cattle by confirmed Arsenic poisoning at Mungay creek and a historical reference is below.

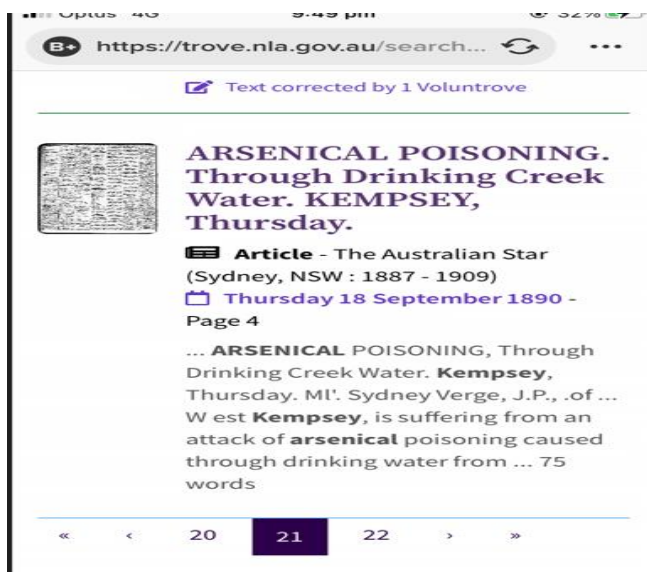


Fig 15 1890

Arsenic is everywhere in the Macleay valley and especially in the Macleay valley where there is a known amount of 20,000 tons at Georges Junction, enough to look at building an Arsenic

works fig 5 above. There have been many studies of the water in the river including Ashley and Graham 2007 but none when there are works over or near known arsenic outcrops.

Other possible pollution would be noise pollution, I hear trucks going up Armidale clearly from my place, oil/chemical spills into river, cement dust and general dust.

6. Transport

The project will create increased traffic on the Kempsey Road which has a high fatality rate already. Concerns are traffic going past 3 schools which are built right on the road, Green Hill, Willawarren and Bellbrook. There is an obvious danger with kids going across road or travelling on bikes. There is a downhill slope going past Bellbrook.

There will be a significant number of trucks carting sand for concrete up the road.

Who will be paying for road damage and upkeep?

At the moment the Council/government is spending money on fixing the Armidale Road near Lower Creek, the proposed new road will go over the river near this part and follow the river on other side(south) to the Armidale. Why have one existing road that requires millions to fix and another on the other side of the river that will cost many millions to build. There must be a way to build/fix one road not having two going to same place, this would save many millions of dollars.

7. Health and safety

I have concerns re health and safety for those working there as the place is isolated and a significant number of people will be there. Apart from obvious worksite danger I think the most dangerous part will be the travel to and from work. There have already been 2 single car fatalities on the road to Kempsey this year, many people will be inexperienced driving on the road type, may have unsafe vehicles or motorcycles on a dirt road, may have never driven in mud etc.....

A bus may be the only and safe way to travel especially when tired as most people will be due to isolation.

Mental health could be a problem when people are cooped up in a camp situation and bullying, drink and drugs could all be a source of problems apart from isolation.

8. Power saving

Most people would not know what a MWh is and it is the unit identified on p37 of summary of findings. It is in fact one thousandth of a normal unit of power a KWhr, so the \$7to9 saving would be 0.7 to 0.9 cents per unit. Just this year the price of power has gone up about 10cents a unit so the 0.7 cents is virtually insignificant. This costing is calculated by modelling and things don't always work out.

This is a small saving to offset a possible pollution disaster.

The Project stated that it will pump water up during the day and send down at night when there is more demand. This is correct as long as it is sunny and windy and people have their heaters or coolers on all night.

Actually power consumption drops off during the night and people on smart meters have their power price dropped significantly from during the night from about 10 pm.

The wholesale price of electricity can be found at The National Energy Market and it shows price all the time, this can be found by studying AEMO data sheets which does not show expensive power through the night but when people are cooking their tea etc and when business is operating during the day, air conditioning shops etc.

The main source of power for the scheme will come from coal as they produce power all the time and it can be cheap from 10 pm until morning.

Just to get the power to the site a considerable amount of energy is lost, once the power leaves the power station losses start to happen.

Loss through resistance in wires this is significant and depends on type and size of wire and length which is hundreds of Km.

Loss through changing voltage to suit project.

Loss through efficiency of motor and pump

Loss through friction going up to top dam

Loss of water containing the potential energy by evaporation or seepage.

Loss of energy by running back down the tunnel , friction

Loss of energy by turbine and generator inefficiencies.

Loss of energy in switching station and the wires going back to Armidale.

9. Employment and housing.

Yes there will be many jobs created if the project gets off the ground.

How many of these jobs will be for local people?

Local people have seen workers going “up river” but none local. If workers are to be employed from outside where will they stay or the families stay, at present there are many local people homeless because there are no available houses or rent too high.

If workers are to stay in a camp where will their families live and where will they go to on their days off. On 14 October I saw workers going towards the site.

10. location

Why was this location chosen, was it because it is the best place to generate electricity or it just fitted into a special area?

Were all other places considered such as pumping water in and out of old mines, pumping sea water up a hill for example to the west of Wollongong where the sea is near the mountain and an area available to build a high dam.

11. Alternatives

Was the existing power station on the Oakey river considered, water does not have to be pumped up, it had run from about 1956 to Feb 2013 when damaged by flood. Why can't this dam be fixed, cost should be much less but efficiency greater, and output should be proportional to cost. Don't have to pump water into it.

This power station powered the whole new England area including Armidale and was controlled by the New England County Council. I can remember it as a kid as we lived on the Oakey river.

If people are educated to use less power any new plants will not be needed. It is only recently Liddell Power station closed down when it was running fine but not maintained for the last part of its life.

The output of the New England solar and wind farms is yet to be produced and when they come on line use their energy to do the pumping up hill and have a closed system that does not have power input.

Small nuclear plants could be used to decrease power demand and would have a use far from power source such as Broken Hill and Mt Isa. Thus this plant would not be needed.

What would be the cost of batteries to harness the solar and win energy in comparison to the \$1.8 billion which is not fixed. The Snowy Hydro Scheme 2 has had a large budget blowout and is still not finished. Maybe something can be learnt from it.

12. National trail

The EIS summary states that the project will not impact the national trail while on the map it clearly shows the National Trail passing immediately behind the batching plant, these are noisy and there is always a chance cement dust will impact the immediate area. I personally know this because I have worked on similar type batch plants.

Summary

I do not support the application on several grounds.

1. The company was unable to keep confidential records to themselves and sent them to another party (NSW Planning) indicating a lack of security and basic checking. NSW planning then published them in the EIS.
2. The engagement with the local Aboriginal community left a lot to be questioned, they need to work with people and do not expect them to act when they come along. The OMPHS seems to be happy with destroying or damaging 12 out of the 44 identified sites this is nearly a quarter of the sites will be damaged or lost. Once gone they are gone forever.
3. The location and amounts of ores according to the EIS vary greatly from official NSW Dept Mineral Resources maps, books, historical newspaper cuttings of which there are literally hundreds especially the location and amounts of arsenic and antimony. The numerous tin mines were not mentioned in the EIS. The obvious problem is pollution caused by these substances; Bellbrook is suffering now from historical mining further up the river possibly at Hillgrove.

4. The amount of logging described in the EIS was different to many other historical records, books and sawmill locations. This indicates a lack of research.
5. The amount of drilling seems to be inadequate with just 9 holes bored and probably the most important going down from the top dam is incomplete. This indicates a lack of thorough preparation.
6. There are safety concerns especially with the road and transport past 3 schools which front on to the road.
7. The employment opportunities will bring others into the area where there are many homeless while the locals are still looking for work. There have been people working on the site from time to time for a few years and to my knowledge were not local except for some isolated examples regarding Aboriginal research and artifacts. The Aboriginal liaison officer was not from this area. This indicates a lack of understanding with the local community.
8. Any people coming to the area will put pressure on the housing market and possibly put more local people on to the streets.
9. There are many examples in the EIS where work is yet to be done, for example the unfinished bore hole. This indicates a lack of preparedness.
10. The location seems to fit within a created area instead of in the most appropriate place.
11. There are clearly other alternatives to this project including batteries to store the New England Energy from solar and wind. Batteries are more responsive to demand and may work out at a cost saving and an environmental saving without damaging the environment and putting in more power lines which can be a fire hazard.
12. The project will clearly impact the national trail although the EIS said it would not.

End of submission

