

Submission Cover Sheet

Fingerboards Mineral Sands Project Inquiry and Advisory
Committee - EES

445

Request to be heard?: No - but please email me a copy of the
Timetable and any Directions

Full Name: Leah Hammond

Organisation:

Affected property:

Attachment 1: EES_Submission.d

Attachment 2: Lindenow_Aquifer

Attachment 3:

Comments: See attached submission.

2nd October, 2020

Dear Inquiry and Advisory Committee members,

I am writing this submission in response to the EES for the Fingerboards mineral sands mine project. I wish to express my deep opposition to the establishment of a mineral sands mine for several reasons. Firstly, it will significantly impact the horticultural industry that is based on the Mitchell River Flats downwind and down river of the proposed mine site. I am also deeply concerned about the water supply required for the Fingerboards mineral sands mine, in particular, where Kalbar plan to source the water and the impact that will have for other existing users. Lastly, I have deep concerns about the health impacts of exposing radioactive materials to the elements and what effect that exposure would have on the surrounding communities, long term. It is for these reasons I hope to demonstrate the unsuitability of a mineral sands mine in any capacity in our beautiful region.

My husband and I are long term East Gippsland residents, my husband having been born in Bairnsdale and brought up on a farm in Glenaladale. We have four children aged under ten years and 100 acres that we grow vegetables and fatten cattle on in Ellaswood. My husband works as a general manager on one of largest vegetable farms on the Mitchell River flats, which he has done for the last 15 years. Our children attend Lindenow Primary School and I am a part-time teacher there also. We are involved in the Lindenow community, having held positions on local committees including the Lindenow and District Preschool Committee as well as the Glenaladale Recreation Reserve Committee of Management. We chose this place and this community to raise our children because of the clean living that it affords, the high quality of farming land, high quality water and the work opportunities that are available, as well as a deep connection to the people within the community. All of these aspects of life in this region will be seriously jeopardised by the construction of a mineral sands mine at the Fingerboards.

Development and construction of a mineral sands mine so close to the Mitchell River Valley and the established horticultural industry that it supports poses an unacceptable risk to the industry and the economic activity that it generates. Known as the salad bowl of Australia, the EES states that the flats produce, at a very conservative estimate, \$62 million worth of produce, which is distributed nationwide as well as internationally. The Mitchell River Flats sustainably employs at least 1200 people directly as well as indirect employment through processing facilities and other associated secondary industries. Compare this with only a purported 200 jobs generated by the mine project for a period of, at best, 20 operational years. Kalbar claims the employees they'll source will be local but I question their definition of the term 'local'? Will their employees be local to East Gippsland or is local only defined as a broader region, like the South Pacific region?

The Fingerboards mineral sands mine project has the potential to decimate the clean, green image that the Mitchell River Valley horticultural industry prides itself on, not to mention the actual risk of polluting vegetable growing areas with radioactive dust. Even the possibility of contamination could decrease demand for produce from the area, therefore threatening the livelihoods of so many of us that currently live in and call this beautiful area home. Any risk to the existing horticultural industry in the area is an unacceptable one and should be reason enough on its own to question the viability of a mine that will not provide long term employment for East Gippsland locals like the horticultural industry has done and will continue to do indefinitely, so long as the mine does not gain approval.

The EES states they'll be "sourcing 3 gigalitres of water per year for the project from surface water (winterfill from the Mitchell River) and groundwater from the Latrobe Group Aquifer from a proposed borefield within the infrastructure area." I have several objections to this. Firstly, some background information. In 2011, a sustainable water strategy was developed and it identified an additional 6000 megalitres of water could be allocated as winterfill licences from the Mitchell River. This allocation was initially developed for irrigators to grow the agricultural industry in the Lindenow Valley by increasing their water security to grow and maintain high quality production. There was also consideration that some of the 6000 megalitres may have been required for domestic supply by East Gippsland Water. The water wasn't made available for allocation at this time due to the uncertainty around off stream water storage solutions.

The 6000 megalitres initially identified by the sustainable water strategy was never intended to be used for mining purposes. As a result of this water allocation, since 2011, many farm businesses in the Mitchell River Valley have invested heavily in on-farm infrastructure with the understanding that at some stage, these winterfill licences would become available. If the mine is approved, Kalbar has indicated that they will want to purchase at least half of the 6000 megalitres but likely more. They have considerable financial backing and would be able to pay a premium price for their licence, knowing that it is a necessity for their mining operation. This would artificially drive up the price of these winterfill licences, unfairly favouring Kalbar and excluding many agricultural and horticultural businesses that have already invested in infrastructure to be able to utilise the winterfill licences when they become available.

To continue on the topic of water, Kalbar also wish to take ground water from the Latrobe Group Aquifer. In the Bairnsdale area, water supply from aquifers is quite detailed. There are several aquifers in middle to deep locations including, The Lindenow study area(Unincorporated aquifer), Munro aquifer, Sale Aquifer, Rosedale aquifer and the Stratford aquifer (Latrobe Group Aquifer).(See attached Map) It is believed that all of these aquifers are connected in different ways. Their titles are just that and the boundaries separating these aquifers are often marked by roads. It is very unlikely that Munro aquifer stops at the Princes highway and the Sale aquifer is separate but begins on the other side. The Lindenow study area (Unincorporated aquifer) is classified by being deeper than 25 metres and drilled to no deeper than the basement rock and in Lindenow must be in an area *North* of the Bairnsdale Dargo road. Successful bores in this area find water in the sand layer that sits on the basement rock. The Stratford aquifer (Latrobe aquifer) begins *South* of the Bairnsdale Dargo road. There is less than 10 irrigation licences in this aquifer as most of the licenced water held for this aquifer is held by power stations and is used to de-water mines near Traralgon. The best access to the water in this aquifer is again in the sand that lies on the basement rock. Essentially it is all the same groundwater; it's just been given different names (Please see attached map for exact aquifer locations).

The basement rock gets deeper as it heads to the south and south east and so this does improve the availability of water going in the same direction. As the water gets deeper into the ground the more increased pressure it is under making it more reliable to that particular bore hole. It is the opposite heading in a North to North West direction. The bores in the Glenaladale region are in the top of the borefield, they are shallower and therefor have low pressure. If large amounts of water are drawn from the Latrobe aquifer south-south-east of Glenaladale, water will naturally fall to that area of draw and water availability will almost certainly be negatively impacted in the Glenaladale region.

Bores in the Lindenow region are also at potential risk. This means that farm businesses that rely on their bores during dry periods when the Mitchell River becomes restricted, will almost certainly find their bores to be in a similar state of unreliability due to a lack of water availability, as it will be during these dry periods that Kalbar will also be pumping heavily from their bore, should the mine project be approved.

Lastly, my final major concern (although I hesitate to stop at just three) about the development of the Fingerboards mineral sand mine is the health impacts it could have on the community of people living downwind of the project area, of which my family and I are members of. My husband and I have 4 young children, aged 3 to 9 years old. They go to school and preschool in Lindenow. My husband works in Lindenow, visiting farms in Woodglen in what is predominantly an outdoor profession. Kalbar would have me raise our children in an area that they have identified as being at risk of being covered in contaminated dust, given the right (or in my case wrong) wind direction. Our children are still at a young enough age that, should the mine be approved, they will spend the majority of their developmental years living downwind of this sand mine, being exposed to contaminated dust that has the potential to significantly impact their health for the rest of their lives. I reject the claim by Kalbar that dust was only at risk of exceeding the air quality standard on four days of the year. I've lived through some shockingly windy days here in our region and they don't happen on just four days of the year. How can Kalbar say with certainty that their activities won't impact our health, won't cause us to suffer from debilitating health conditions like respiratory cancers? This is a totally unacceptable risk; to jeopardise the long term health of entire communities like Glenaladale, Walpa, Lindenow South, Woodglen, Fernbank, Wuk Wuk and Lindenow for the financial and material gain of a few.

It is my belief that the Fingerboards mineral sand mine project is a totally inappropriate and unsustainable proposition. If the Fingerboards mineral sand mine project was given approval, it will jeopardise the viability and success of an already established and sustainable horticultural industry and the jobs and economic activity that it generates. Extra demand on water resources, both at surface water level and ground water aquifers will almost certainly negatively impact other users and their ability to operate in a financially profitable manner. The possibility of contaminated dust impacting on the long term health of many of the neighbouring communities is also a completely unacceptable risk, one that I am not prepared to take with my family and my community. Please consider the unacceptable nature of the Fingerboards mineral sand mine, for the health of our local economy, the health of our local horticultural industry and the health of our local people.

Yours etc.,

Leah Hammond

Lindenow & Munro Groundwater Transfers - Guide



Rosedale



Stratford



Sale



Wy Yung

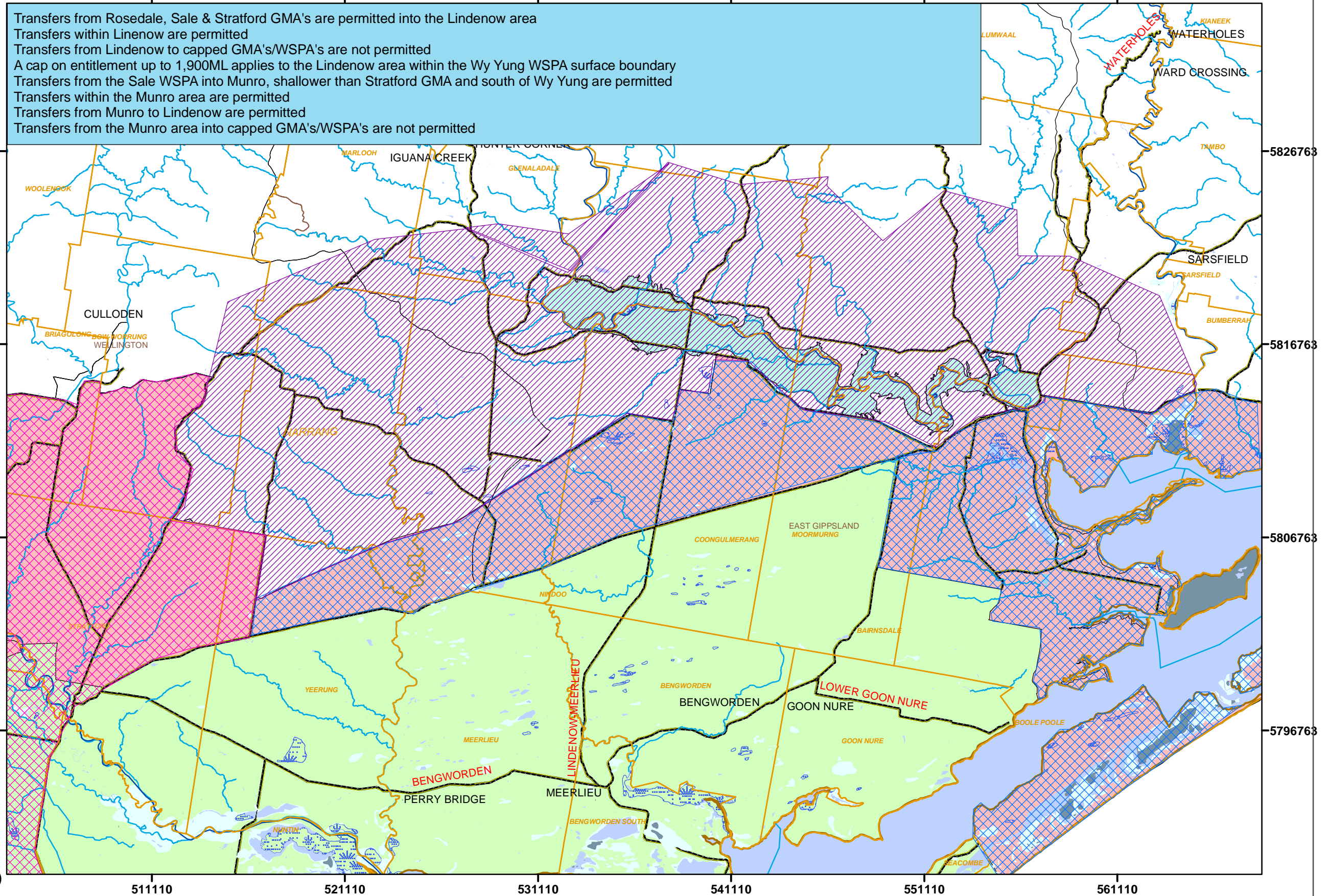


Lindenow



Munro Non GMA (shallow)

Transfers from Rosedale, Sale & Stratford GMA's are permitted into the Lindenow area
 Transfers within Lindenow are permitted
 Transfers from Lindenow to capped GMA's/WSPA's are not permitted
 A cap on entitlement up to 1,900ML applies to the Lindenow area within the Wy Yung WSPA surface boundary
 Transfers from the Sale WSPA into Munro, shallower than Stratford GMA and south of Wy Yung are permitted
 Transfers within the Munro area are permitted
 Transfers from Munro to Lindenow are permitted
 Transfers from the Munro area into capped GMA's/WSPA's are not permitted



Map produced by Southern Rural Water.
 For further information contact: (03) 5139 3100.



Date: Thursday, 15 January 2009

Map Projection: GDA_1994_MGA_Zone_55



Source and Accuracy

Base information is primarily sourced from data supplied and used with the permission of the Department of Natural Resources and Environment, Victoria.

Care has been taken to ensure the accuracy of this map, however Southern Rural Water does not accept responsibility for any errors or omissions.

Produced By: Jane Waller