

Submission Cover Sheet

Fingerboards Mineral Sands Project Inquiry and Advisory
Committee - EES

488

Request to be heard?: Yes

Full Name: Michelle Barnes

Organisation:

Affected property:

Attachment 1: Michelle_Barnes_-

Attachment 2:

Attachment 3:

Comments: See attached submission.

FINGERBOARDS MINERAL SANDS PROJECT

SUBMISSION ON THE EES & ASSOCIATED DOCUMENTS

Michelle Barnes - October 2020



Michelle Barnes – Oct 2020. Views across to plateau with deeply incised tributaries of the Mitchell River proposed for mining. Productive horticultural river flats sit below.

Dear Inquiry and Advisory Committee members,

This submission wholeheartedly OPPOSES Kalbar Operation's proposed Fingerboards open-cut mineral sands mine.

I acknowledge the Gunaikurnai people as the Traditional Owners - past present and emerging - of the land this submission refers to, and whose sovereignty has never been ceded.

BIG PICTURE

The 1675 ha proposed Fingerboards project area is on a plateau next to the Heritage Mitchell river [approximately 350 meters away], directly opposite Bairnsdale's Woodglen drinking water supply dams [3.5 km away downwind], 500 meters from the productive \$155 million dollar a year horticultural Lindenow flats, approximately 20 km upstream and UPWIND from the city of Bairnsdale – our region's hub, and 25 km upstream from the internationally listed Ramsar Gippsland Lakes system which will be impacted ecologically.

The location and hydrological setting of this mine proposal is **HIGHLY INAPPROPRIATE**. The Mitchell River vitally supplies drinking water to over 18,300 customers in the major regional city of Bairnsdale and surrounding towns. Pressure on the system is already high, with water restrictions regularly in place as the region grapples with drought, bushfire and climate change. The Lindenow vegetable growing industry employs 2000 people, and relies on the Mitchell River for irrigation. It is part of our community and is a key contributor to **Victoria's Food Bowl** as well as exporting around Australia and internationally. When Kalbar removes 3 to 4 GL of water annually for 15 to 20 years from our system, everyone else will lose. This mine proposal is **grossly inequitable**, placing all the other existing Mitchell river water consumers [the general community and Gunaikurnai Traditional Owners] at risk and disadvantage. I urge you to advocate in favor of **community water rights and security** and reject this mine.

The Gippsland Lakes are a popular and lucrative tourism destination with a multitude of tourism dependent businesses and townships such as Paynesville, Eagle Point, Metung and Lakes Entrance. Tourists come from all over the state, the country and the world to see and interact with the natural beauty East Gippsland and its Lakes have to offer. The Lakes also support vibrant recreational and commercial fishing interests.

I live within 20 km down wind of the proposed mine and run a photography business which relies on the stunning, relatively intact condition of East Gippsland's environment. I choose to call this region home for it's great outdoors, diverse

community and a *future comprising the intelligent interaction between economy and healthy country*. Residents collectively feel a strong sense of custodianship towards 'naturally magic' East Gippsland from which we gain our sense of place and belonging. Here we raise our children, we work play and dream of clean futures. We uphold the human rights to breathe unpolluted air, drink clean water. We support local businesses who thrive off their mutually beneficial relationship with East Gippsland's natural amenity. ***East Gippsland's character simply doesn't resonate with open-cut mining.***

Many people here are horrified and frightened at the prospect of East Gippsland becoming a 'mining destination'. If mineral sands mines get a foot in the door there is no going back. Kalbar has already expressed their intentions to expand further into the Glenaladale deposit and potentially other areas of East Gippsland. Our lifestyle, brand and reputation, visual amenity, ecology, water, air, health, employment diversity, cultural heritage and land values stand to be permanently degraded by Kalbar's proposal. Existing businesses in industries such as tourism, fishing, agriculture, horticulture and associated services will be unfairly disadvantaged by Kalbar's interests. Existing and future jobs will be lost and people will move away. Tragically this mine and others like it will generate a permanent intergenerational ***net loss in jobs***.

Irrigation statistics show that if the 3 to 4 billion liters of water Kalbar requires annually was redirected to growing vegetables, 3 times more jobs could be created than by Kalbar's proposal. National Farmer's Federation statistics tell us every job created in agriculture leads to 4.2 indirect jobs. Kalbar claims 1 mining job leads to 1 indirect job. They claim the project will create an unimpressive 200 direct jobs, which aren't even guaranteed to be local. When compared to the loss of horticulture, tourism and associated jobs resultant of the mine, this project makes no economic sense for the area [Example see ref to ABC article at end of this submission]. The promise of \$100,000 incomes for the few that do manage to procure a job could generate some vocal supporters for the mine, but these are an absolute minority in the community. Aggressive entitlement to gain a job at any cost (economic, environmental, social, cultural), when others will suffer is an invalid argument and un-Australian.

I can't emphasize strongly enough, the toxic heavy mineral sands which Kalbar wants to mine in East Gippsland are worth far more to the local, regional and state economy when they are ***left in the ground***.

Kalbar are not good corporate citizens here. Bullying and aggression by Kalbar against local landholders not wanting to surrender their land and homes for the mine has been duly documented. Kalbar are unwelcome, and not an authentic part of this community. Despite their slick mining spin, false job promises and expensive advertising campaigns, people here aren't silly. Kalbar has no previous experience

operating a mine – no proven track record. They recently changed their company name and structure. Now being a private company it is near impossible to get information about their assets, shareholders and corporate connections. This sort of behavior should be regarded with suspicion. As occurs often with mining companies, a common practice is to set up a \$2 front company who funnel the profits elsewhere [often overseas], then declare themselves bankrupt at project's end to avoid rehabilitating the monstrosly mashed up site. Mining bonds are worth a fraction of what it costs to adequately rehabilitate mine sites. While this practice may not be illegal (it should be!) it is unethical and immoral in the extreme. I urge you to take this into consideration.

Kalbar's idea of 'community consultation' has often been token, inadequate and misleading. They don't genuinely accommodate feedback, and have at times claimed to have consulted when in fact proper consultation wasn't done.

My community stands to gain nothing and lose much if this mine is approved. On a personal level I'll need to move house to avoid exposing my child to cancer-causing respirable silica and radioactive dust, as well as potentially having to share the road on his school bus route with hugely increased b-double truck movements. Those risks are non-negotiable.

Please advocate for community constituents rather than Kalbar Operations (nee Resources) who have **NO SOCIAL LICENSE** to construct this mine.



Michelle Barnes – Oct 2020. Typical gate signage in Glenaladale.



Michelle Barnes – 11 Dec 2018. East Gippsland Shire Council chambers packed with strong community opposition to Kalbar's mine - looking forwards.



Michelle Barnes – 11 Dec 2018. East Gippsland Shire Council chambers packed with strong community opposition to Kalbar's mine – looking backwards.

Note: A motion was passed by EGSC councilors AGAINST the mine.

<https://www.gippslandtimes.com.au/story/5809786/east-gippsland-shire-council-will-oppose-glenaladale-mine/>



Michelle Barnes – 5 Feb 2019. East Gippsland Shire Council chambers packed with strong community oppositions to Kalbar's mine.



Michelle Barnes – 29 Oct 2019. Vegetables against Kalbar's mine - Kalbar info night @ Bairnsdale Sporting & Convention Centre. This large conference room was packed with several hundred people opposing the mine.

ECOLOGICAL VALUES WITHIN & NEAR THE PROJECT AREA



Michelle Barnes – 2020. Gippsland Red Gum remnant vegetation at risk of destruction by Kalbar. Note hollow-bearing tree.

The area proposed for mining by Kalbar is environmentally irreplaceable. It can't be replaced by 'offsets', jargon or Kalbar.

Over time I have become acquainted with places within the proposed project and infrastructure options (activity) area. They reveal themselves to you slowly, as if speaking a poetry of the land not immediately audible to passers by. It speaks of it's ancient histories, evolutions, survival through the ravages of colonialism, it's witness to massacre of Gunaikurnai peoples, it's inhabitants – past and present, animal, plant and human, it's fragility, springs, waterways and wetlands, it's large old trees and vegetation remnants so rare they clutch the fringes of extinction.

This is a special place within an already fragmented landscape. The 1400 or more mature hollow-bearing trees supplying vital homes for fauna, numerous rare and endangered vegetation communities, threatened fauna and rich Aboriginal Cultural Heritage have managed to survive a brutal history of massacre, land theft and clearing to make way for grazing and farming. Yet miraculously they've held on –

an unlikely and commendable triumph, a wonderful place for all to visit and learn from. They won't survive mining.

The EES ecological investigations surveys occurred over short periods, during times of drought and post bushfire in the project area. It is therefore very likely the limited surveys did not reveal the full extent of species and ecosystem characteristics contained within the project and infrastructure options areas. One area on private land in the north-western section of the project zone still hasn't been surveyed because Kalbar can't gain access. Why can't they gain access? Because land holders don't want them here.

Native Vegetation

Kalbar plans to remove up to 188.50 ha of native vegetation, 763 large mature, hollow-bearing trees, and 130 smaller trees for the construction and operation of this mine. They estimate 114.71 ha of this to be 'moderate' quality, and 21.08 ha to be 'high' quality vegetation. Given the fragmented nature of East Gippsland's farmed landscapes, and the vital importance of habitat patches and corridors providing connectivity for fauna and biodiversity through these areas, this represents an unacceptable loss.

The project and infrastructure options area has significant native vegetation values. There are EVC's, ecological communities and species with national state and regional conservation status.

The EES states (Vol. 1, p 8-30):

Eleven EVC's were recorded within the survey area along with 6.1 ha of land classified by DELWP as a 'current wetland'. Six of the 11 EVC's are considered endangered in the Gippsland Plain and East Gippsland Lowlands bioregions, four are vulnerable and one depleted.

Kalbar surveys identified 3 nationally significant flora species – Swamp Everlasting, Dwarf Kerrawang and Gaping Leek-orchid. Four state significant species were found – Slender wire-lily, Blue Mat-rush, Sandfly Zeiria and Slender Tick-trefoil. There was also potential for the occurrence of 80 additional species of state significant flora, with 53 of these having a moderate or high likelihood of occurring. More surveys would undoubtedly reveal the presence of many of these, as Kalbar's limited surveys were largely undertaken during drought and after bushfire, and didn't cover the whole project area due to access issues.

Victoria's native grassy woodlands represent some of the rarest and most fragmented ecological communities in Australia. Their distributions are highly restricted and in severe decline. Two of these communities with national and state conservation statuses occur within the project / infrastructure options area:

1. *Gippsland Red Gum (eucalyptus tereticornis subsp. Mediana) Grassy Woodland and Associated Native Grassland (GRGGW)*.

Nationally EPBC Act listed as **Critically Endangered**.

This community was once widespread across the central Gippsland Plain, but now less than 5% of its original extent remains (EPBC Act Policy Statement). At least 14 species of flora and fauna associated with this community are listed as EPBC Threatened.

Kalbar claims 1.74 ha will be destroyed. Given its conservation status, NO amount of this ecological community should ever be removed. Every occurrence of this community must be protected, and this mine represents a key threatening process. Offsetting one for another when there is so little left is unacceptable.

2. *Forest Red Gum Grassy Woodland*.

State FFG Act listed as Threatened.

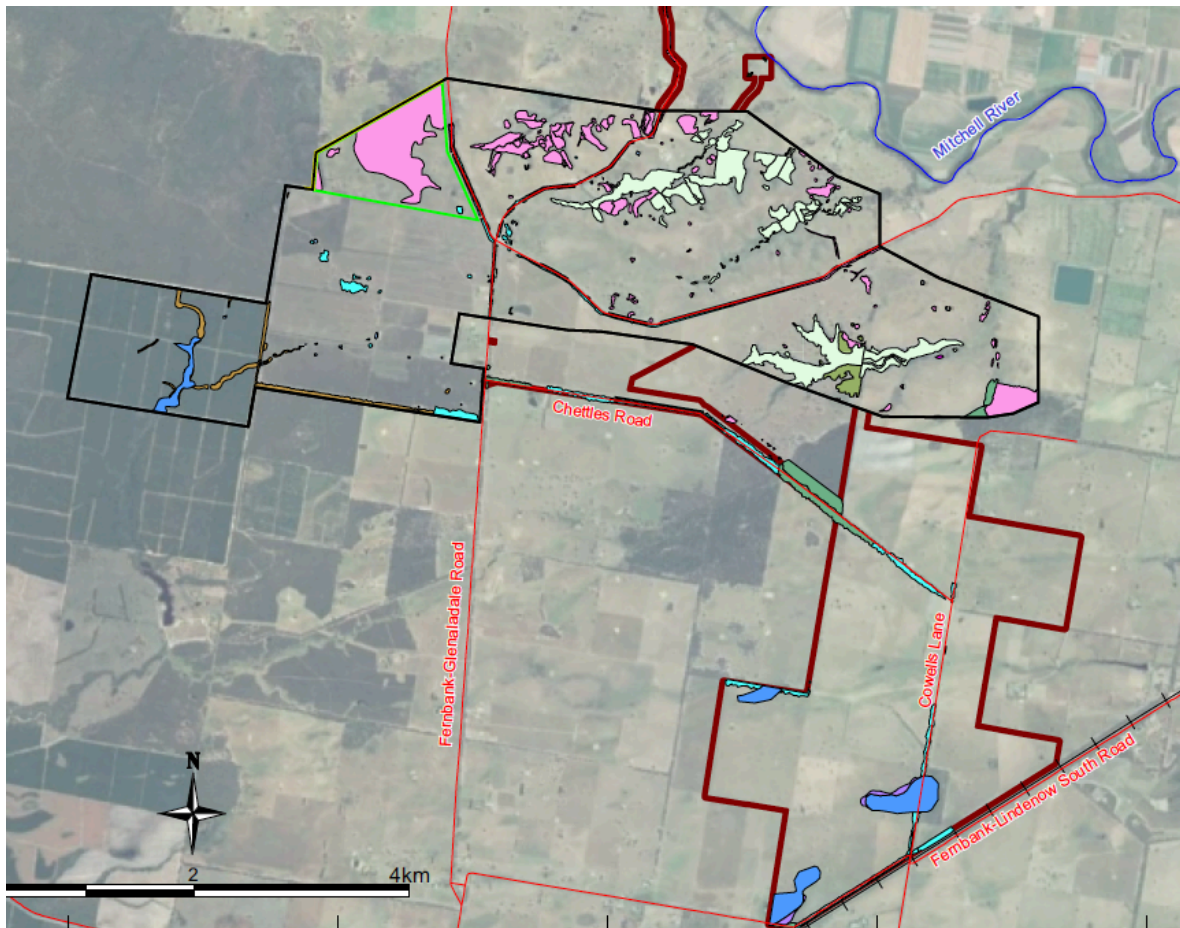
Kalbar claimed 14.54 ha will be removed in the Detailed Ecological Investigations, and revised that in the Executive Summary to be 11.57 ha – so who knows which one is accurate. [This is fairly indicative of the quality of the EES, which has numerous inconsistencies and contradictions throughout]. None the less, any removal of this vegetation community is unacceptable within a conservation recovery framework.

Both GRGGW and Forest Red Gum Grassy Woodland are associated with the broader state EVC (55), Plains Grassy Woodland which has a bioregional conservation status of endangered.

The EES determines the GRGGW and Forest Red Gum Grassy Woodland ecological communities as having HIGH RISK ratings post mitigation. Moreover, it states with regards to each of these communities that 'Any amount of removal would have significant impact to this ecological community' (Vol.2, p 9-64)

Destruction of ANY GRGGW and Forest Red Gum Grassy Woodland ecological communities is unacceptable.

The gullies which flow into the Mitchell River proposed to be mined by Kalbar contain remnant vegetation important to habitat connectivity within this agricultural landscape. For example, Lucas Creek contains relatively intact riparian vegetation comprising Valley Grassy Forest (vulnerable), and Box Ironbark Forest (vulnerable) EVC's and Moilun Creek contains the Endangered Swamp Scrub/Warm Temperate Rainforest/Billabong Wetland Mosaic EVC.



Source: Fingerboards EES Main Report Vol. 1, Figure 8.9 (excerpt)

Note, tributary gullies of the Mitchell River proposed to be mined contain remnant EVC's. These gullies support vegetation crucial for corridors, habitat connectivity and biodiversity in this landscape. They also support riparian, wetland and aquatic habitats for an array of frogs, fish, birds, migratory species etc.



Source: As above

[See more information about native vegetation under further sections of this submission – it's all interconnected]



Michelle Barnes – Oct 2020. Purple Diurus (*Diurus punctata*) orchid (FFG threatened) growing in GRGGW (EPBC Critically Endangered) under threat by the Fingerboards project.

Native Fauna

It is important to take into consideration that fauna values such as diversity of species and numbers of individuals identified in the EES are likely to be lower than in reality. Surveys did not cover the entire project area and were of short duration. They occurred during drought and after bushfire. No long term fauna studies have been done by Kalbar. Values identified by the EES are nonetheless significant, even when incomplete, which gives an idea of how much more is likely to be out there.

Given the vast and severe impact the 2019/20 bushfires had on East Gippsland's forests (>70 % were burned), it is crucial to protect every remaining area of unburned habitat in the landscape. Fauna are struggling as it is, with competition for suitable habitat and food a harsh reality for those who survived. The EES repeatedly states that there will be inevitable 'fauna mortality associated with removal of habitat', and increased truck movements in the area. The mitigation strategies they have briefly proposed such as ramps leading out of mine pits for animals to climb out of paint a heartbreaking picture. The idea of animals falling into mine pits or having their trees cut down as they sleep during the day in their hollows is unbearable and inhumane. These impacts of open-cut mining are totally unacceptable at any time, and especially now.

An impressive diversity of native fauna exists within the project and infrastructure options zone and 10km radius surrounding area, including many with national, state and regional conservation status. Field surveys recorded 108 native species including 76 birds, 16 mammals, 8 frogs and 8 reptiles.

Within the project and infrastructure options area, EES surveys found the following listed species:

National Significance: Grey-headed Flying Fox (Vulnerable)

State Significance: Yellow-bellied Sheath-tail Bat (FFG Listed, Vic Advisory list Near Threatened), Grey-headed Flying Fox (Vulnerable). There was additionally one potential call recorded of the Eastern Bent-wing Bat (FFG listed, Vic Advisory List Vulnerable)

Regional Significance: Eastern Long-necked turtle (data deficient) and Emu (Vic Advisory List Near Threatened).

[These are only what Kalbar found, and only directly within the activity area. Many more values have been recorded previously both within this zone and the 10 km surrounding radius, meaning they are absolutely still likely to occur and suffer impacts]

The Grey-headed Flying Fox stands to lose 184 ha of remnant foraging habitat comprising Box Ironbark Forest (7.51 ha) which includes some of the species main feed trees, Lowland Forest, Lowland Herb-rich Forest, Plains Grassy Forest, Plains Grassy Woodland and Valley Grassy Forest. This species has already been under terrible pressure from drought, heat stress, bushfires, food shortage, habitat clearance, shooting, infant mortality, and death by power lines, barbed wire and fruit netting.

EES surveys recorded **EIGHT SPECIES OF BATS** in the activity area! Aside from the Nationally listed Grey-headed Flying Fox, and state-listed Yellow-bellied Sheathtail Bat, these species were also found:

Chocolate Wattled Bat, Gould's Wattled Bat, Large Forest Bat, Little Forest Bat, Southern Freetail Bat, and White-striped Freetail Bat.

Considering bats are vital ecosystem pollinators, among other important services, this bat diversity is really exciting. That the activity area has habitat available and able to support such diversity is significant. Future fauna surveys have the potential to reveal more bat species in the area.

Examples and statistics of the extensive fauna values either previously recorded or likely to be found here, but not recorded by Kalbar's minimal surveys follow.

The activity area is expected to occur within the foraging range of the Powerful Owl (FFG Vulnerable), Masked Owl (FFG Endangered) and possibly the Barking Owl (FFG Endangered) who have been previously recorded within it or nearby. Large forest owls rely on hollow-bearing trees and decent forest remnants in the area to feed and roost.

The Swift Parrot (Nationally EPBC Critically Endangered) has been recorded 2.5 km from the infrastructure options area. It loves to forage in the Box Ironbark forest that Kalbar will clear. Up to 184 ha of it's suitable foraging habitat will be cleared.

Giant Burrowing Frog records are extremely rare, but this nationally vulnerable species has been recorded in the Mitchell River National Park nearby. There is 15.2 ha of their potential habitat in the form of ephemeral streams, tributaries and adjoining vegetation which will be destroyed in the activity area.

Desktop data showed **19 nationally significant fauna species** previously recorded within 10km of the activity area, including 8 terrestrial species listed in Section 4.2 of the EES Scoping Requirements:

Giant Burrowing Frog, New Holland Mouse, Long-nosed Potoroo, Regent Honeyeater, Australian Painted Snipe, Growling Grass Frog, Green and Golden Bell Frog, and Australasian Bittern.

Desktop data showed **25 state significant species** known or likely to occur within 10km of the activity area. According to Kalbar, 15 of these have a moderate to high likelihood of occurring, although that number could be higher:

Ballion's Crake, Black Falcon, Brown Treecreeper, Chestnut-rumped Heathwren, Diamond Firetail, Eastern Great Egret, Grey Goshawk, Hardhead, Hooded Robin, Lace Goanna, Masked Owl, Powerful Owl, Southern Toadlet, Speckled Warbler, White-bellied Sea-eagle.

Migratory species are a matter of National Environmental Significance (EPBC Act 1999). Previous surveys in the activity area recorded 1 EPBC listed migratory species, the Rufous Fantail, while Latham's Snipe could also visit due to identified suitable habitat. Another 17 EPBC-listed migratory or marine species have been recorded within 10 km of the activity area, while 2 more were nominated by the Protected Matters Search Tool (PMST).

The Mitchell River tributaries support a large population of the Vulnerable (state level) Australian Grayling. Threats from Kalbar's mine to this species identified by the EES (Vol 2, pg 9-5) include reduced water quality (turbidity, hydrocarbons, heavy metals), loss of aquatic habitat through loss of containment (eg, hazardous materials, chemical spills), and reduced environmental flows to the Mitchell and Perry River catchments.

The identified and potential fauna diversity within and surrounding the activity area is incredibly high. Remnant vegetation within Kalbar's proposal provides critical habitat and landscape connectivity for a huge array of species – many who are conservation listed, and many who aren't. They are all important and interrelated in the big picture of the survival of Australia's fast disappearing native fauna. Australia has one of the world's highest rates of vegetation clearing, and the world's **highest rate of mammal extinctions**. Kalbar's mine conflicts with our imperative to reverse these untenable trends.

The Fingerboards mine proposal presents an unacceptable and irreversible threat to native fauna and the habitat upon which they rely.

Hollow-bearing Trees



Michelle Barnes – Oct 2020. Mature hollow-bearing tree on land acquired by Kalbar. Hollows supply critical habitat for a myriad of native fauna including owls, gliders, bats and birds. Gunaikurnai people sometimes buried people in trees.

Hollow-bearing trees (HBT) take centuries to replace, as the formation of hollows takes upwards of 100 years. 'Loss of Hollow-bearing trees' is listed as a Threatening Process under the Victorian *Flora & fauna Guarantee Act 1988* (FFG) and nominated and recommended as a 'Key Threatening Process' under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC).

Trees with hollows provide critical habitat for a myriad of fauna including gliders, owls, other birds such as cockatoos and lorikeets, reptiles, and bats. The project area contains known habitat for hollow-dependent fauna such as the Masked Owl (FFG Threatened; NRE list endangered), Yellow-bellied Sheathtail Bat (FFG Threatened) and Powerful Owl.

Kalbar will destroy 763 large mature trees (the kind that support hollows) under the preferred ore transport option to the rail siding at Fernbank East. If this option isn't possible, 788 will be destroyed. The EES risk rating system deems the imminent loss of HBT's brought about this project to have ***extreme consequences***.

As land clearing and deforestation escalate across Australia, hollow-bearing trees are disappearing from the landscape. NO loss of hollow-bearing trees is acceptable.



Michelle Barnes – Oct 2020. Remnant Red Gum forest containing hollows. Note anti-mine sign on property in background.

WATER

Kalbar's mine project area exists in and will impact major catchments and aquifers within East Gippsland and Wellington shires. These include at the broad scale - The Mitchell River Basin to the east, the Thompson River Basin including the Perry River to the west, the La Trobe Group aquifer and the Ramsar listed Gippsland Lakes system which they discharge into at Jones Bay, Lake King and Lake Wellington.

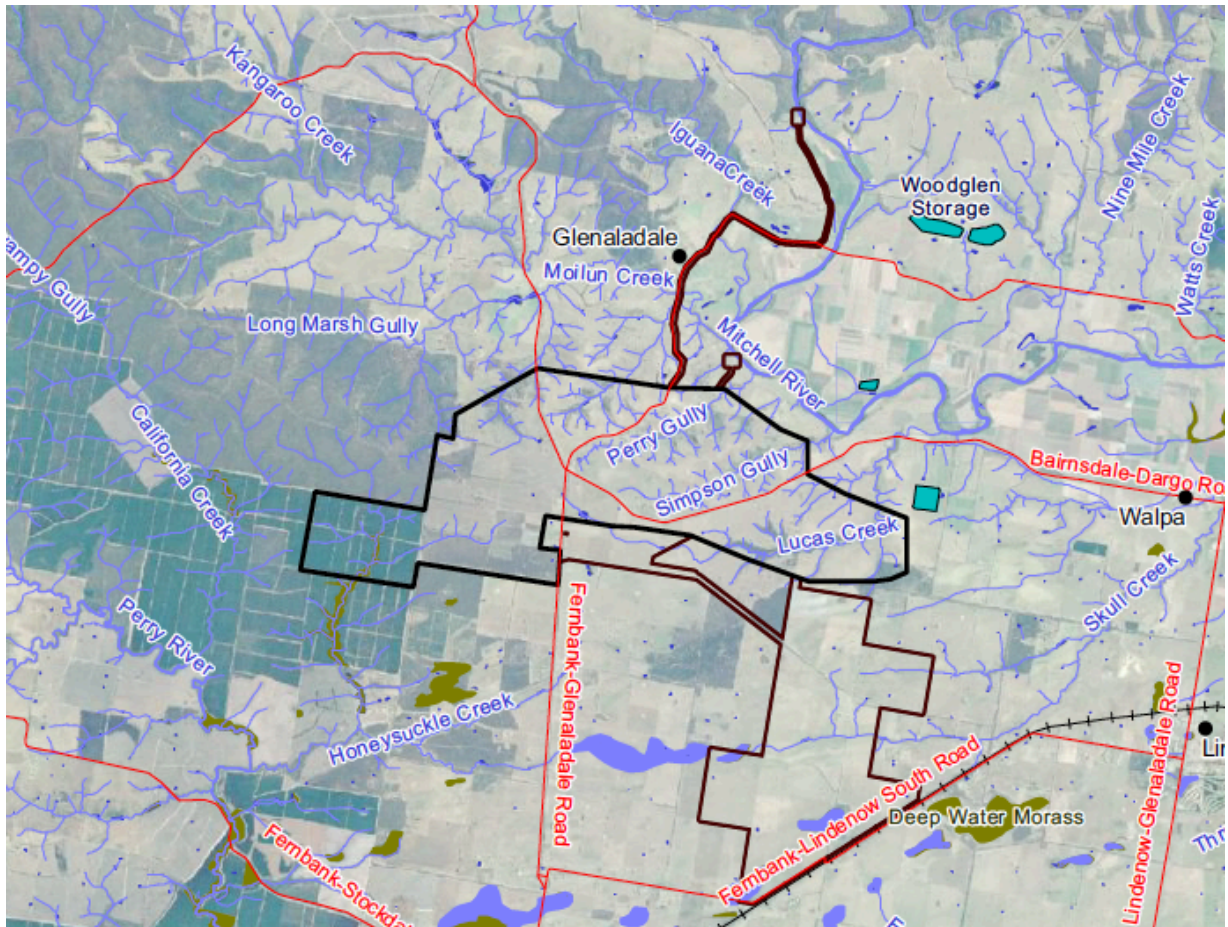
Rivers and surface and groundwater systems in the Gippsland Basin are intricately connected by complex interrelationships. Digging a 13 square km mine pit 45 meters down through layers of stratigraphy which contain aquifers will affect water drainage and movement patterns in recharge and discharge zones. This can have far reaching impacts long distances from the mine scar, such as at the Gippsland Lakes and other irrigation districts. Deep open-cut mining in this landscape will likely cause permanent hydrogeological changes in Gippsland and East Gippsland. This is not a gamble we should be willing to take.

The Heritage listed Mitchell River is Victoria's largest unregulated (free flowing) river, representing 'an unique example of riparian ecology' (Wikipedia). It provides important aquatic habitat for native species such as a large population of vulnerable Australian Grayling.

The project and infrastructure options area comprises approximately 0.74% of the Mitchell's 4714 km² total system catchment. At close to 1%, this represents a significant amount of impact to the life of the river and is ***totally unacceptable***. Kalbar's proposed annual extraction of 3 to 5 GL of surface water under winterfill license could lead to a 1.7% reduction in river flow rates, in addition to reduced seasonal recharge to the Mitchell River alluvial aquifer. (EES Vol 2, p. 9-83)

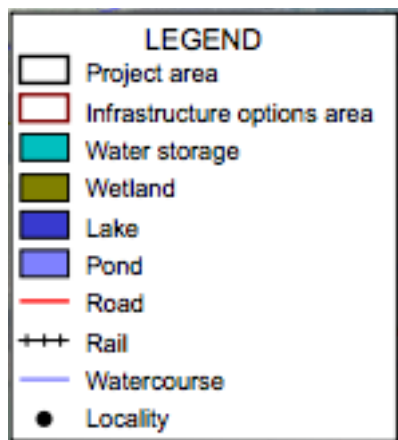
The mine footprint will impact several tributaries integral to the Mitchell River catchment, destroying the landscape and visual amenity of the area. Of these tributaries, Perry Gully, Lucas Creek and Simpson Gully will have their entire headwaters and majority of their catchment mined, while Unnamed Tributaries 1, 2 and 3, and Long Marsh Gully will suffer impacts from mining in their headwaters, and a new infrastructure road will be pushed through Moilun Creek (see Figure 2.8 from the Draft Work Plan below). These creeks drain directly into the Mitchell River approximately 300 to 500 meters away. At the edge of the mine cavity the remaining sections of creek channel which lead to the river will be damned. This is a highly dissected fluvial landscape within an active, dynamic hydrological context. To propose open-cut mining here is madness.

[See Figures & photo below]



Source: Fingerboards EES, Main Report Vol 1, Figure 8.22 (excerpt)

Note, northern section of project area will mine several heavily dissected gullies flowing directly into the Mitchell River. The Perry Gully will be left filled in. These gullies support important remnant vegetation and aquatic habitat



Source: As above



Michelle Barnes – Oct 2020. View from Carey's Rd, dissecting Simpson Gully south of the Mitchell River. Note heavily dissected topography.

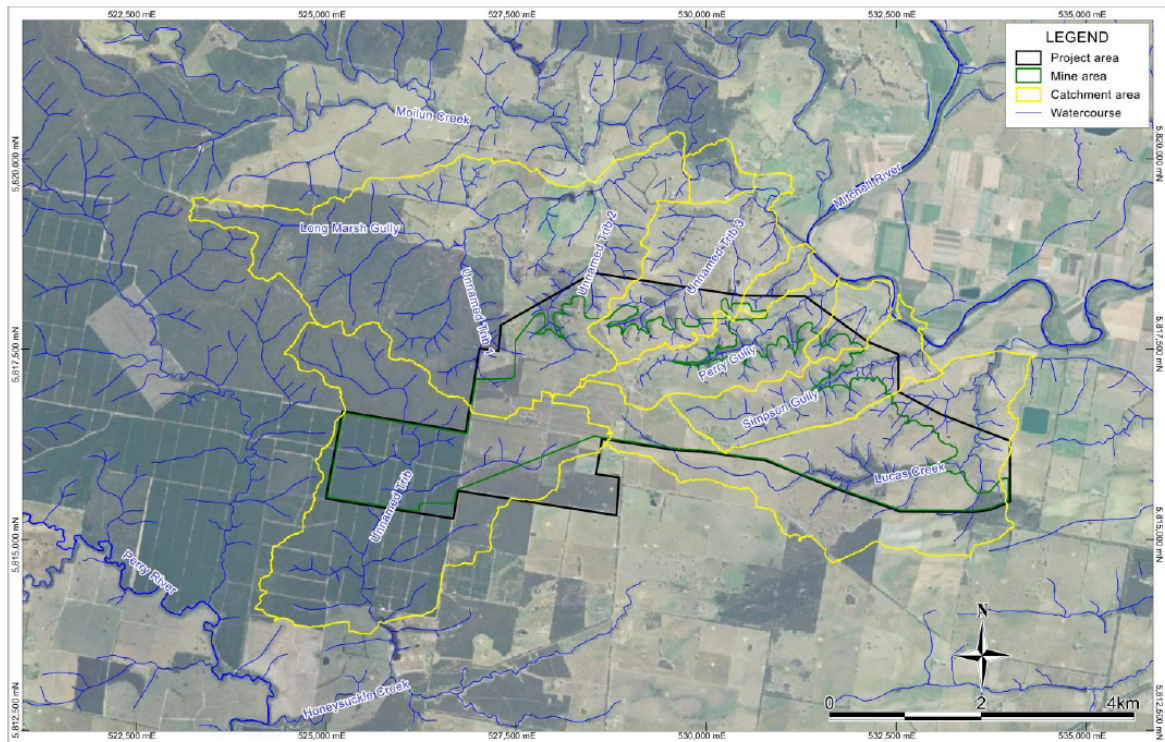


Figure 2-8: Proposed mining licence area (project area) subcatchments

Source : Fingerboards Work Plan (Draft) Figure 2.8.

Sub-catchments within the project area. This figure shows catchments draining into both the Mitchell and Perry River systems, illustrating a highly fluvial landscape.

We are moving into a 'La Nina' climate cycle, where rainfall is already beginning to dramatically increase. Given Kalbar's already inadequate water studies were modeled during drought conditions, it makes them untenable. The increased rain, water flows, and likelihood of significant flood events, and their impacts on tailings structures, dams and mine voids during La Nina make this mine proposal even more wildly irresponsible and dangerous.

Placing a mine in this highly fluvial, erosive landscape while heading into La Nina is reckless, dangerous and unacceptable.

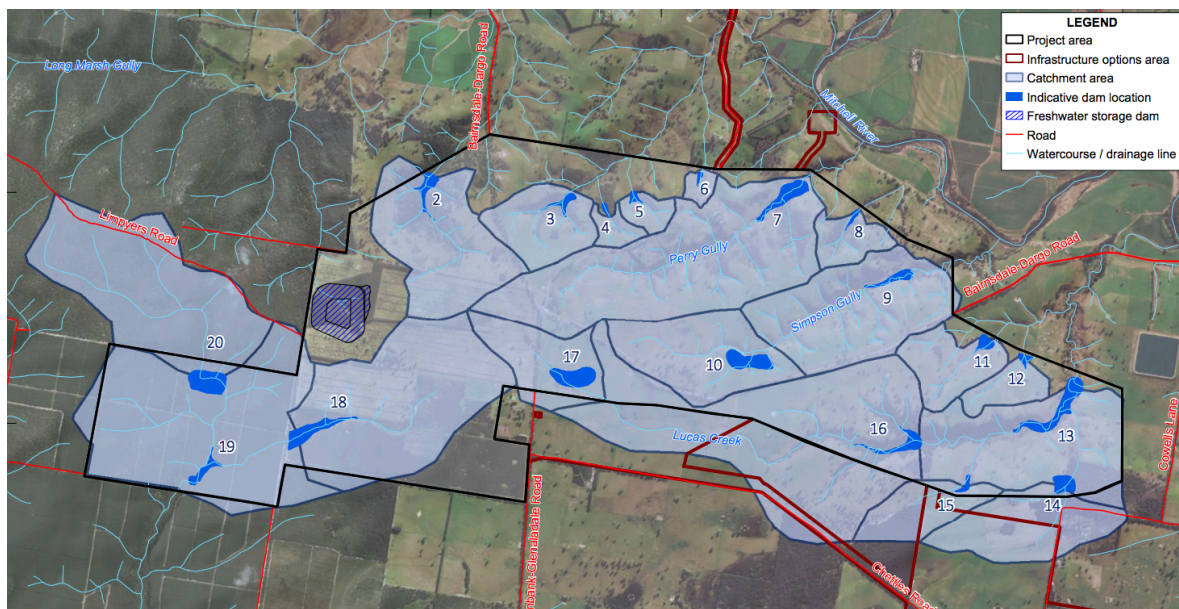


Source – Mine Free Glenaladale Facebook page – 26 Oct 2020.

Kalbar contractors bogged in a paddock after they had forced their way onto private land where they aren't welcome. This is a fine example of how Kalbar don't understand land and hydrology in the project area. They don't listen to local knowledge and advice. With La Nina on the rise, how can we possibly trust heavy machinery and mining in this landscape?

Every drainage line and tributary within the project area will be dammed, resulting in reduced flows in to the Mitchell River and changes to surface water distribution. Water flows and quality will be impacted, while dam walls pose a constant threat of failure, leakage and siltation. Permanent damage to geology, stratigraphy, landscape structure, geomorphology, hydrology, fluvial / alluvial processes and aquatic health will occur locally within the mine site, the Mitchell River and downstream in the Gippsland Lakes and Perry River system. Changes to regional aquifers are likely, especially in, but not limited to the La Trobe Group aquifer.

This mine poses an unacceptable risk to the Mitchell River, Gippsland Lakes, La Trobe Aquifer, Perry River, Providence Ponds and Woodglen water storage facility.



Source: Fingerboards EES Main Report Volume 1, Figure 3.15 (excerpt)
Every water course within the project area will be dammed.

Several important conservation reserves exist near the proposed mine, including Providence Ponds Flora & Fauna Reserve, Saplings Morass Flora & Fauna Reserve, and nationally significant Deep Water Morass wetland, all of which are Ground Water Dependent Ecosystems (GDE) or contain GDE elements. The mine's impact on ground water which keeps these ecosystems alive and healthy is of grave concern, despite being played down by the EES.

As mentioned, Kalbar needs 3 to 4 GL of water to run their mining operations, including ore processing and dust suppression. To do this they will need to extract surface water from the Mitchell River winterfill and/or ground water from the La Trobe Group Aquifer. Water extraction licenses from Southern Rural Water (SRW) have NOT been secured. The Groundwater and Surface Water Impact Assessment states (Appendix A006, Appendix F, p 25):

Discussions with Kalbar Operations Pty Ltd have acknowledged the challenges in accessing surface water from the Mitchell River under current licensing arrangements.

When the Mitchell River doesn't meet the flow threshold for winterfill, allocation of ground water will be used. These purchases will be arranged POST EES APPROVAL.

How can a project that relies so heavily on water resources be approved when there is no guarantee of water supply?

All of the potential impacts on surface and groundwater are only modeled, so how can we really know what will happen?

The preferred ore transport route to the Fernbank East rail siding involves constructing a haul road through paddocks directly to the west of the 10.2 ha Saplings Morass Flora & Fauna Reserve, 3.4 km south of the mine pit. This cuts through land adjacent to wetlands which connect to the reserve and could divert surface flows away, potentially altering its essential hydrology. Saplings Morass contains significant flora such as ***Swamp Everlasting*** (EPBC Vulnerable, FFG Threatened), and ***Dwarf Kerrawang*** (EPBC Endangered).

The National Recovery Plan for the Swamp Everlasting identifies ***Australia's largest population within Saplings Morass Flora & Fauna Reserve*** – 6000 plants in 2008. This is far and above numbers anywhere else, which range in number from 60 to 1000. This population is therefore of **critical ecological importance** in the national recovery picture for the species. The National Recovery Plan identifies '***disruption to hydrology***' which could drain wetlands as a major threat to long-term persistence of populations. Other relevant threats include 'road or rail works' and 'mining'. The EES doesn't mention this, instead claiming the reserve won't be impacted.

This mine poses an unacceptable risk of killing Australia's largest population of Swamp Everlasting.

The EES Impact Assessment states that post mine closure there will be 'permanent changes to topography, altering runoff to the Mitchell and Perry' rivers and permanent changes to topography causing increased flood risk. (Main Report - Vol 2, p 9-119).

Residual increased flood risk within the Mitchell and Perry river catchments as a result of open-cut mining is an unacceptable threat to regional communities and the environment.



Michelle Barnes - 2020. View from inside Saplings Morass Flora & Fauna Reserve looking towards Paddock containing wetland where infrastructure haul road will be constructed. [Preferred transport Option to Fernbank East rail siding]



Michelle Barnes – 2020. Saplings Morass Flora & Fauna Reserve – a ground water dependent ecosystem which supports nationally threatened vegetation.

The **90 ha, 40m deep and 20m high temporary tailings facility (TTF) can't be guaranteed not to fail** during high rainfall and flood events, or to leach toxins into surface and ground water under any conditions. In such events the Mitchell River, Perry River and Gippsland Lakes will be contaminated with toxic flocculents and mine tailings waste [radioactive chemicals, heavy metals and silt]. Siltation and toxic bioaccumulation in the aquatic ecosystems of the Mitchell River, Gippsland Lakes and Perry River is of major concern. The EES provides no assurance that a tailings facility structural failure won't happen. It's all about 'likelihoods' and modeling. This isn't good enough. Tailings structure failure is relatively common in the mining industry – a fact that Kalbar ignores. For example the tailings dam failure at the Stockdale mine in Benambra now pollutes the Tambo River, and was never repaired by the company. **No plan** has been provided by Kalbar to the EES process about how the **tailings facility** will be constructed – so **how can the EES deem the probabilities of structural breaches and toxic leaching is 'low'?**

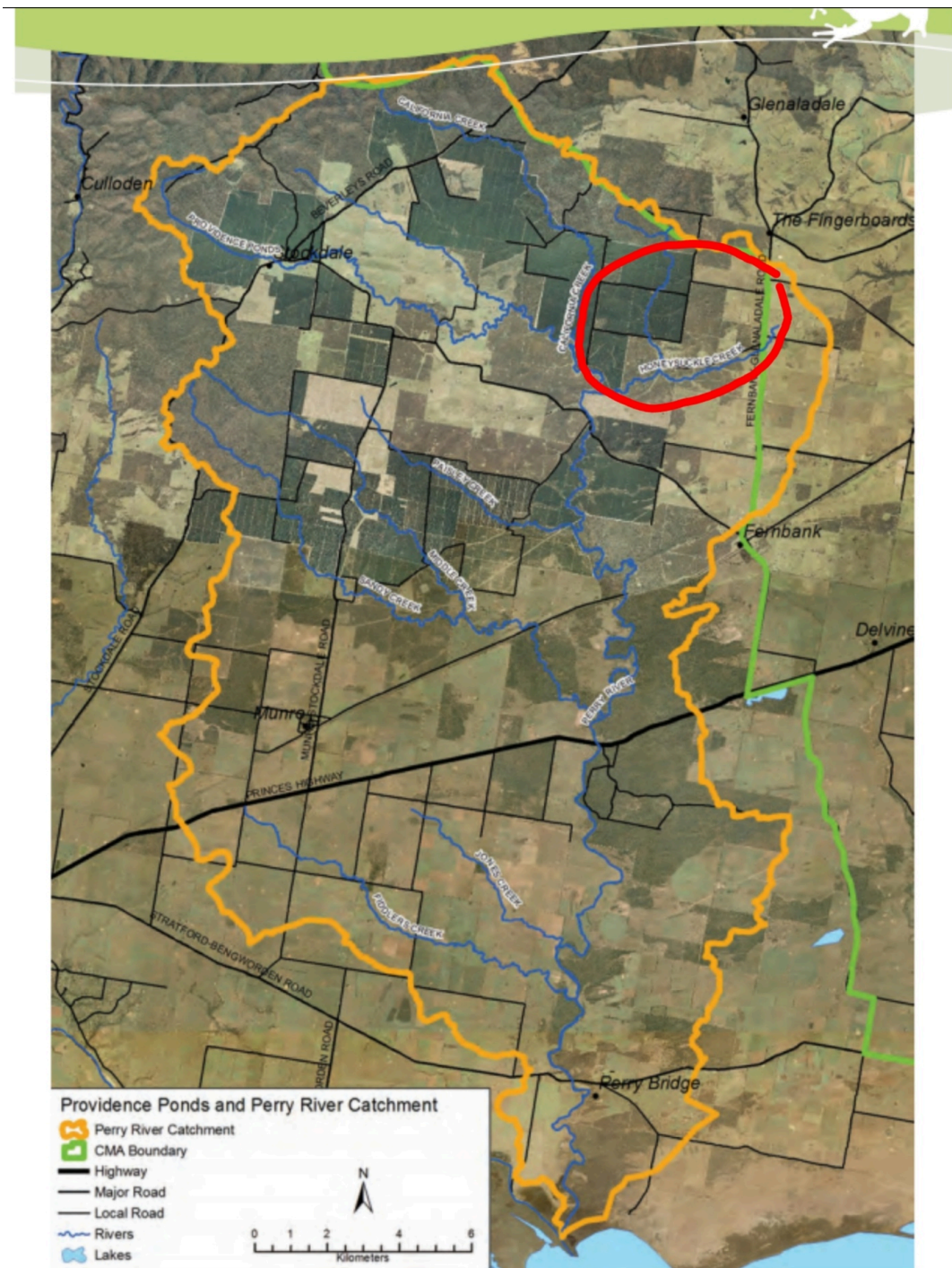
The Perry River system is recognized for its high representation of '**chain of ponds' channel morphology**, the best remaining examples being in the Providence Ponds Flora & Fauna Reserve, 6.4 km directly downstream of a section of the proposed mine footprint and tailings facility to be constructed in it's headwaters at Honeysuckle Creek. Chain of ponds which once were widespread across south-eastern Australia are now very rare.

The Providence Ponds represents one of the most intact remaining sections of this remarkable landform, and supports an array of rare and endangered flora and fauna. These include the endangered Sandy Flood Scrub EVC, critically endangered GRGGW ecological community, a diversity of wetlands, vulnerable Dwarf Galaxias, vulnerable Flinders Pygmy Perch, vulnerable / threatened Swamp Everlasting, vulnerable / threatened New Holland Mouse, vulnerable Green and Golden Bell Frog, endangered Gaping Leek-orchid, and endangered Prostrate Cone-bush.

Runoff to the Perry system is predicted by the EES to increase by 13% in year 8 of mine operation, and then retain an annual increased average of 1.05%. In terms of hydrology inputs to this delicate system, these increases could cause erosion, sedimentation and water quality issues within the system, placing this landform at risk of severe degradation. This conflicts with the West Gippsland Catchment Management Authority's (WGCMA) 'Strategic Directions Statement' for Providence Ponds and the Perry River catchment which aims to create long term priorities for significant key natural assets.

Moreover, The EES itself does not use reliable data for the Perry River system. Due to there being insufficient flow monitoring stations and historical data on the Perry, Kalbar's consultants calibrated flow data from the Mitchell River and applied it to

the Perry. This is ridiculous, given the completely different channel morphology and flow regimes of the two systems. Surely this guesswork is not a suitable standard for an EES?



Map of the Providence Ponds Perry River Catchment indicating the major waterways, catchment boundary and the extent of West Gippsland Catchment Management Authority region (source: WGCMA)

Source: WGCMA 'Providence Ponds & Perry River Catchment Strategic Directions Statement 2017'

Note : Red circle added by Michelle Barnes to show approximate location of the tailings facility and mining within the Perry River headwaters 6.4 km upstream of Providence Ponds Flora & Fauna Reserve.

The Perry River catchment with its rare chain of ponds is too precious to mine, especially when there are so many unknowns. The mine proposal conflicts with existing conservation objectives.

CULTURAL HERITAGE



Michelle Barnes - Oct 2020. Canoe scar tree near the mine boundary.

This landscape was heavily used and occupied by the Gunaikurnai people. The fertile alluvial flats, Mitchell River and its tributaries, gently undulating topography and open grassy woodlands were abundant in food sources, shelter, water, materials for tool manufacture, trees for canoes, shields, and other applications. Various types of scar trees, such as canoe and ring trees exist throughout this landscape while local farmers frequently unearth stone artefacts during various farming activities. The likelihood of burial sites and ancestral remains must be considered. This is a significant physical and spiritual cultural heritage (CH) landscape at local, regional and national scales. It is important to the Gunaikurnai and to Australia as a whole. Kalbar acknowledges ***CULTURAL HERITAGE WILL BE DESTROYED during construction, mining and associated works.***

The EES cultural heritage (CH) documents admit that detailed and extensive surveys are not complete. They state that parts of the project footprint are likely to contain areas with high densities of surface and sub-surface artefacts such as stone tools, flints and scatters. There are numerous scar trees, whilst Gunaikurnai locals tell us burial sites are present. The proposed mine project / infrastructure area is of huge cultural and spiritual importance to Gunaikurnai people.

A Cultural Heritage Management Plan (CHMP) has not been completed. The EES states this will be worked out as they go. How could this be allowable? A comprehensive archaeological investigation must be completed to determine the full range of CH values. Kalbar can't assume GLAWAC or Aboriginal Victoria (AV) will sign off on a CHMP. The EES should not be approved without a completed CHMP. Given the CH values within the project areas, the EES should not be approved at all.

The Registered Aboriginal Party [RAP], Gunaikurnai Land And Water Aboriginal Corporation (GLAWAC) has flagged the mine as potentially being at odds with their 'Gunaikurnai Whole-of-Country Plan'.

https://www.gunaikurnai.org/wp-content/uploads/gk_whole-of-country%20plan%20LR%20FINAL%20270815.pdf

During a recent GLAWAC zoom meeting about the mine, it was revealed 81 % of respondents to a GLAWAC survey were against it:

<https://gunaikurnai.org.au/fingerboards-ees-yarn/>

GLAWAC's Interim Position Statement about the Fingerboards mining proposal in April 2019 states:

The proposed mining operation will disturb and hurt the cultural connection of the Traditional Owners to the land, air and water that is part of the development area.

<https://gunaikurnai.org.au/wp-content/uploads/2020/08/GLaWAC-Interim-Position-Statement-April-2019.pdf>

Regarding Stakeholder Engagement, the CH study states (p 31 & p 167):

At the time of writing, no formal statement has been received in relation to the cultural values reflecting the cultural, emotional and spiritual attachments that Gunaikurnai Traditional Owners may have to the activity area.

This is completely untrue. GLAWAC and Gippsland and East Gippsland Aboriginal Co-Operative (GEGAC) have reportedly both made formal statements opposing this mine. Additionally, in the formal context of East Gippsland Shire Council (EGSC) public meetings specifically about the Fingerboards project, Gunaikurnai

people expressed strong opposition to the mine. Kalbar representatives were present at these meetings. See below, with times of presentations.

11/12/2018 EGSC Meeting:

https://www.youtube.com/watch?v=SeUmG6tTsas&list=PLQP4eH0qtgxPC4F532ODKp_V8uCz77xxD&index=70

22:28 Alan Solomon ; 1:12:04 Casey Richie

5/02/2019 EGSC Meeting:

https://www.youtube.com/watch?v=TX3J_KoVPfA&list=PLQP4eH0qtgxPC4F532ODKp_V8uCz77xxD&index=69

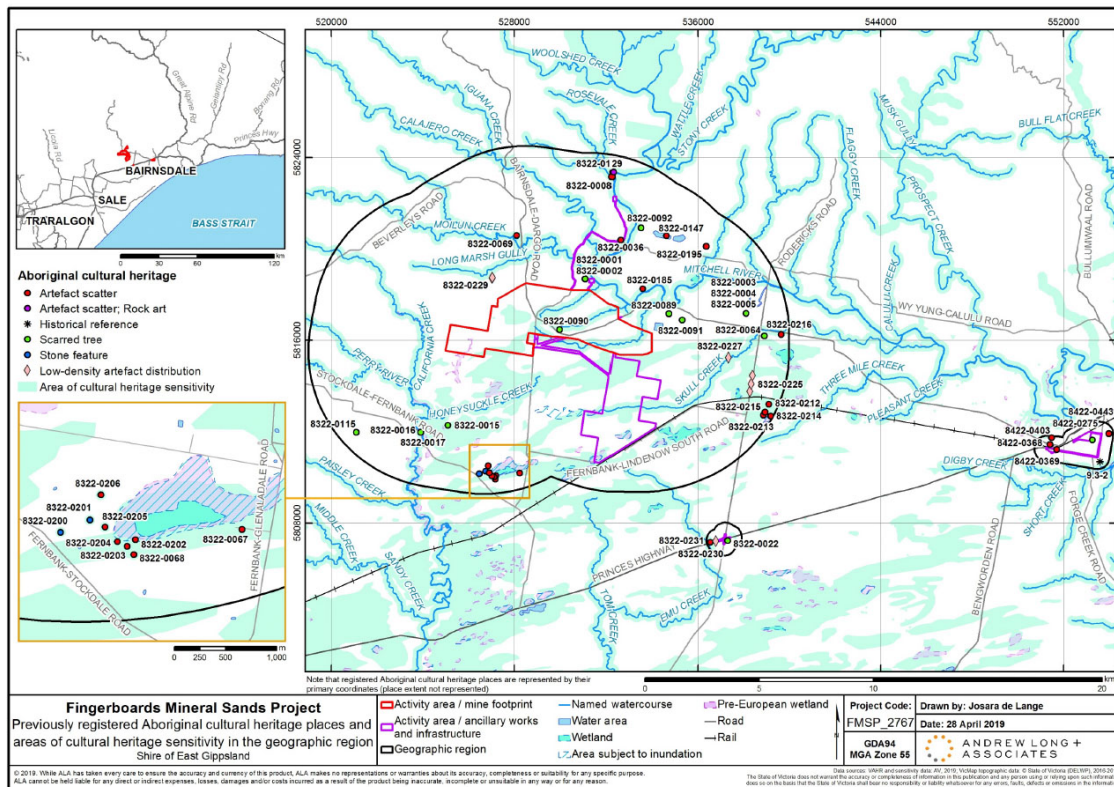
43:40 Alan Solomon ; 1:05:00 Casey Richie

Take note, the gallery was packed on both occasions with members of the electorate opposing the mine, and supporting Gunaikurnai people and country. This scenario is indicative of the feeling of many people in the community who value the legitimacy of Indigenous people on country, and their culture which enriches the region.

Skull Creek is identified by primary historical sources as the site of a massacre of Gunaikurnai people.

Skull Creek runs west-east across the middle of the infrastructure options area. Nobody knows exactly where the massacre occurred along Skull Creek. Disturbance of Skull Creek and the connected landscape would be offensive and inappropriate culturally, archaeologically and historically.

The Heritage Act 2017 states it is an offence to damage or disturb unregistered relics and unregistered archaeological sites. Considering the Skull Creek massacre area is widely known about, it needs to be recognized as an unregistered site with high potential to contain unregistered relics. Skull Creek has never been comprehensively surveyed.



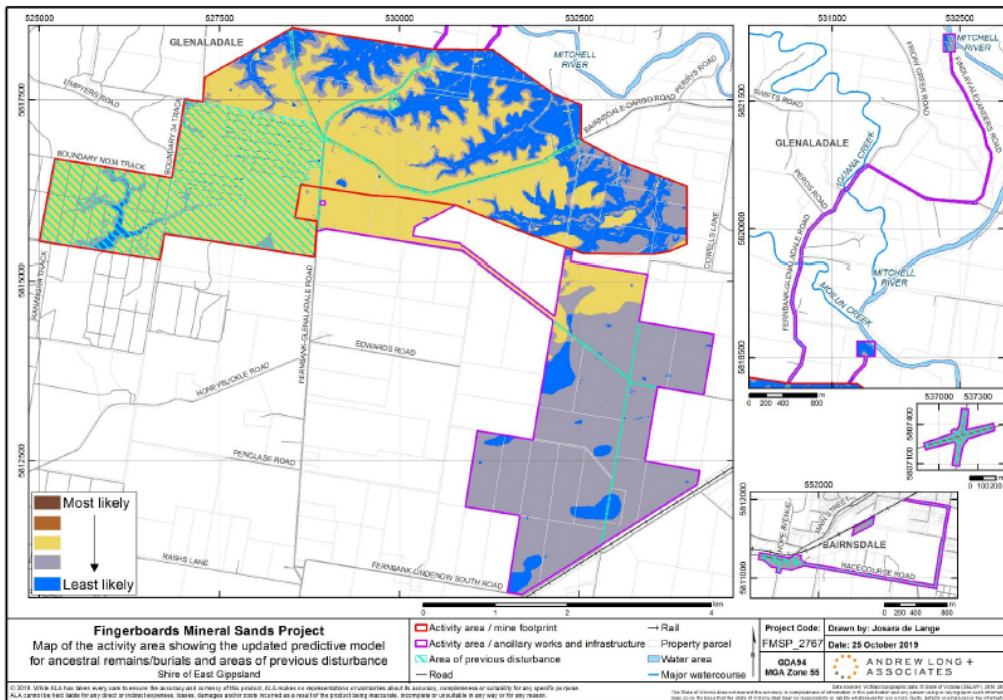
Source: EES CH Impact Assessment p 14. Note location of Skull Creek running across the infrastructure options area where it will be disturbed by road realignments. Skull Creek is mapped as an area of 'cultural heritage sensitivity'.

The EES CH study is dismissive, omissive and inaccurate in its referral to Skull Creek's history. It mentions the murders of two shepherds by the Gunaikurnai, but not the documented massacre of many more Gunaikurnai by European settlers. Historian Peter Gardner draws attention to the Skull Creek massacre in the 1988 edition of his book *Through Foreign Eyes*. He cites primary evidence brought up by Phillip Pepper and Tess De Araugo in their 1984 book *The Kurnai of Gippsland* which, 'threw light on the murderous brutality against black people by Fred Taylor of the Lindenow run. This latter information lent support to a possible massacre at Skull Creek, Lindenow, in 1842-3.' (pp 107-108)

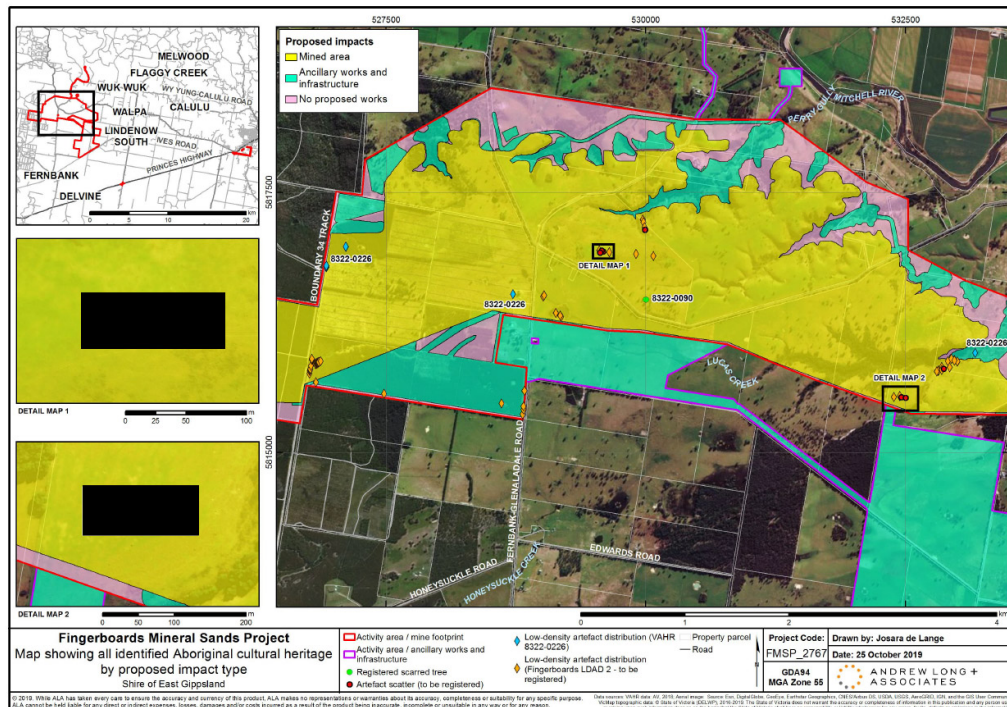
There are numerous references to the Skull Creek massacre online, in books and within local oral history. See an example referring to the massacre in this article (The Age, 2017):

Skull Creek, the site where Rob Hudson played near as a child, was the site of a massacre in 1842, where an unknown number of people were killed.

<https://www.theage.com.au/national/victoria/from-butchers-ridge-to-skull-gully-exhibit-seeks-truth-on-frontier-violence-20171108-gzh6qu.html>



Source: EES CH Impact Assessment, p 265. Predictive model for Ancestral Remains ignores Skull Creek, which is classified as having a very low likelihood of them being present.



Map 20: Proposed project layout mapped with known cultural heritage values *Public redacted version

Source: EES CH Impact Assessment p 171. Map showing 'all identified' Aboriginal cultural heritage by proposed impact type. Note Skull Creek is not even on the map of proposed impacts. This is a major omission by Kalbar. Was it deliberate?

CH field surveys in the 1-A4 category (Streams and Flood plains) within which Skull Creek falls, covered catchments in the northern portion of the activity area and Perry River tributary in the west. Skull Creek is not mentioned. ONE pit was excavated within the 1-A4 zone at Lucas Creek. No sub-surface surveys were done at Skull Creek, which Kalbar doesn't seem to want to know about.

The omissions about Skull Creek by the EES CH study are dishonest, unprofessional and extremely disrespectful to Aboriginal people.

The EES CH Technical Studies contain strange discrepancies and anomalies. For example, on page 51 they state:

No registered historic Aboriginal cultural heritage places or historical references to the activities of Aboriginal people are located within the activity area or wider geographic region.

This makes no sense. Firstly, we know this isn't true. There are multiple primary historical accounts made by settlers about the activities of Aboriginal people in the region. Secondly, the statement comes straight after the document had provided a big list of registered Aboriginal cultural heritage places in the region (pp 48 -50). Thirdly, they've provided a whole section on historical references (Ethnohistorical and historical accounts, p 51) about Aboriginal people within the wider geographic region and possibly the project area.

Another example on page 75 states:

There are no mature native trees, notable rocks, caves or overhangs within the activity area, and so no possibility for scarred trees, rock art sites or quarries.

They then proceed to state that these attributes were examined! Moreover, the ecological investigations make many references to mature and hollow-bearing trees within the activity area, of which up to 788 stand to be destroyed.

This makes me wonder about how much care and attention Kalbar and their consultants have really given to Aboriginal CH. At a recent Kalbar community Webinar, the female MC couldn't even pronounce 'Gunaikurnai'. It felt as though they couldn't care less who the Gunaikurnai are or what they want. This company seems to have scant respect for the Traditional Owners whose country and heritage they want to destroy.

The Fingerboards mine will desecrate and destroy a large amount of Aboriginal cultural heritage and a significant, unique cultural heritage landscape. These heritage values are known and unknown, tangible and intangible, physical and spiritual. This is totally unacceptable.



Michelle Barnes – Oct 2020. 'Koorie Land Not Kalbar Land', Glenaladale. Old Red Gum along Bairnsdale-Dargo road, planned to be diverted by Kalbar.

HEALTH RISKS

Mineral sands mining generates toxic fine dusts dangerous to human and animal health. These dusts include respirable crystalline silica which causes lung cancer, radioactive radionuclides such as Thorium and Uranium, heavy metals, Arsenic, Chromium and Vanadium. Dusts travel long distances in high winds. There are documented cases of mineral sands dusts travelling over 20 km, and they can easily travel much further than that, given the particle dust size of some of their components is at pm 2.5 scale or less. The EES plays down this danger, and has only collected data for an area of 5km around the mine site.

Kalbar admit they won't be able to control all the dangerous toxic dust generated by this mine.

Wind Data Records for East Sale (Bureau of Meteorology website) show the prevailing wind direction recorded from 1943 to 2017 is westerly. This means residents of Lindenow, Bairnsdale, Paynesville and the greater Gippsland Lakes District will be impacted by toxic mine dust. I live on an exposed hill in a high wind zone 20 km directly west of the mine.

The EES air quality study is shamefully inadequate, totally minimizing the significant risks to the population of Bairnsdale and surrounding towns. The Australian Radiation Protection & Nuclear Safety Agency has various codes of practice covering radiation dose limits, transport of radioactive materials and management of by-products generated by heavy mineral sands mining. Kalbar states 'adherence to these codes of practice MAY BE included as conditions of a license issued for the project' (EES Radiation Brochure, pg.8). **MAY BE?!**

We know from other mineral sands mines that the impact of toxic dusts on nearby populations is devastating. Water becomes dangerous to drink whether it be tank water collected off contaminated roofs or town water with the dusts blowing into their storage facilities. Bairnsdale's water supply dams at Woodglen, 3.5 km down wind of the mine are a classic candidate for contamination. The amount of water Kalbar proposes to use to try to control this dust indicates just how much of a problem it is.

Risks to drinking water quality and security posed by the mine are a very real and present danger. Leaching and run off from the mine pit and tailings facility, associated gully erosion, mounding above aquifers, and permanent alterations to hydrology such as flow volumes and direction all pose an unacceptable risk to ground and surface water quality. Populations of people and animals will suffer health consequences from contaminated water supplies and reduced water availability.

During drought, bushfire and climate change, the guarantee of water security is paramount to Gippsland communities.

Risks of contamination by radioactive dusts and polluted water to nearby vegetables grown downstream on the Lindenow flats threatens all Victorians.

SGS Radiation Services broadly identified the following as some of the radiological impacts on the local population: (Fingerboards Project EES Presentations – Radiation)

- Airborne dust during operations
- Consumption of water from Woodglen Water Treatment Plant (WTP)
- Consumption of Vegetables
 - The consumption of vegetables containing low levels of radioactivity
 - The consumption of vegetables contaminated with airborne radioactive dust
 - The ingestion of soil containing radioactive material

This list is not exhaustive and we shouldn't take Kalbar's word for it when they use words such as 'low levels'. During the presentation, Kalbar claimed people could just wash the vegetables, and therefore they didn't need to study these impacts any further. Seriously? Kalbar are unacceptably blasé about my communities' health and wellbeing.

Increased radiation levels as a result of mining is an unacceptable risk to our community.

There is a cancer cluster along the Tambo River, below the Stockman Mine failed tailings dam (pers. com – source: Peter Mac Cancer Centre). We can expect a similar scenario downstream of Kalbar's toxic mine. The EES states, 'Post mining seepage from coarse sands and fines tailings in the backfilled and rehabilitated mine voids will continue post-closure. Potential infiltration to the underlying aquifers will continue to be monitored' (Vol. 2, p 9-89). How is this acceptable?

Noise and light omitted by mine works and truck movements 24 hours a day, 7 days a week for 15 to 20 years is of major threat to the mental health and wellbeing of locals living in the vicinity of the various transport route options and the mine. Enduring this imposition on their peace and quiet will be untenable and torturous for most. Where does this leave existing residents who'll be thus affected? They will be forced to sell up and move, yet will unlikely be able to find any buyers - their asset and peace of mind destroyed.

Constant noise and light will additionally cause distress to local fauna who are already marginalized and struggling to find critical habitat.

Mining here conflicts with all forms of life.

ROADS – DANGER!

If Kalbar's preferred option to transport heavy mineral concentrate (HMC) by truck (via specially constructed back roads within their infrastructure options area) to a rail siding at Fernbank East is not possible, local and regional roads will be subject to massively increased b-double truck movements 24 hours a day.

This is a huge worry for the population in general, and parents whose children will be travelling on and having to share these routes with Kalbar's toxic HMC laden trucks. My child catches a bus 5 days a week to and from school along the Princes Hwy where these trucks will travel. I am genuinely terrified at the thought of this eventuating.

New roads within the project and infrastructure area, as well as increased b-double traffic on local and regional roads generally also poses a high risk of increased direct fauna mortality.

Increased b-double truck movements on public roads in Gippsland are life threatening and unacceptable.

ADDITIONAL ISSUES

There are many concerns about Kalbar's mine that that I've not had time to address in finer detail within this submission. Examples include visual amenity, Draft Work Plan, Planning Scheme Amendment, Council's role, legal issues, rehabilitation, geochemistry, detailed geology, noise, light, and detailed radiation studies.

The EES is such a large document that any individual can't possibly conduct a detailed critique of every aspect within the painfully inadequate 40 day period. This is a major flaw in the process. Communities should be given **at least** 3 months to prepare their responses. Nonetheless, I'm wading through its' depressing contents whilst managing other life responsibilities.

I hold grave fears about every single aspect of this mine, including details not covered herein due to sheer lack of time.

I'll also provide you with a little anecdote. When I initially requested a printed copy of the EES I was told by Kalbar staff that I'd need to pay in the order of \$350 to \$400, so I didn't order one. I later decided I did need one for ease of information processing (slow computer) and it was provided for free, as I discovered it should have been under accessibility rules. The initial attempt to wrongly charge me was dishonest, and is just a wee example of Kalbar's questionable ethics, inconsistency and lack of regard for community.

FINAL COMMENTS

Thank you for the opportunity to comment on the Fingerboards mine proposal EES.

I respect the Land Rights and cultural heritage of Gunaikurnai Traditional Owners which Kalbar's mine proposal threatens. I value a clean green regional economy with its flow-on **long-term** prospects. I value the Heritage listed Mitchell River and the rights of its full catchment to be free from mining, enabling it to continue delivering the full suite of ecosystem services to people and nature alike. These values are greater than **short-sighted** corporate mining profits which don't benefit communities.

All you have to do is drive around and see the 'Stop Kalbar' and 'No Mines Near The Mitchell' signs on rural and suburban gates in Bairnsdale, Lindenow, Glenaladale, Fernbank, Woodglen, Walpa, Iguana Creek, Flaggy Creek, Wuk Wuk, Stratford, Briagalong, Stockdale, Paynesville, Eagle Point, Bruthen and other regional towns to **understand the high level of community opposition to this mine**. Farmers don't want it because they see what it'll do to the land. Townspeople don't want it because it threatens their entire way of life.

Aside from making East Gippsland an enviable place to live and popular tourist destination, a healthy environment doubles up as a cash cow. It's our piggy bank, our golden goose for the future. By growing jobs which don't require its destruction, we assure our children and grandchildren the full future potential to persist successfully and sustainably within this landscape. Once the 13 square km, 45 metre deep hole has been dug and the profits exported, communities are left with damaged land, rivers and aquifers, poisoned water, limited job opportunities, silicosis and cancer clusters. We see this time and time again in the aftermath of mining. If approved, Kalbar's single-minded pursuit of profit will mitigate our future viability. There are too many special values here to mine.

Mining in this extremely inappropriate location is in conflict with community values and expectations, and healthy country.

If East Gippsland and Wellington Shire councils submit in favor of the project, I urge you not to take their positions as representative of the electorate. EGSC passed a motion AGAINST the mine in December 2018 to much celebration in the packed chambers. Certain councilors later worked behind the scenes to have the motion rescinded. Many members of the community felt betrayed by this miscarriage of democracy. Recently Wellington Shire Council passed a motion to submit in favor of the mine despite being in caretaker mode, ignoring widespread community concern and the opinions of councilors in the process of being elected.

There's a lot of grief in our community. We have suffered one blow after another with drought, water restrictions, bushfires and COVID. If this mine gains approval it will break people. It'll be just one blow too many.

I sincerely hope my submission and others like it will make a difference, rather than serving as regretful hindsight twenty years from now. Please use your discretion to differentiate between appropriate and inappropriate mining.

THE FINGERBOARDS MINE PROPOSAL CONTRAVENES THE PRECAUTIONARY PRINCIPLE.

All levels of Government have an intergenerational responsibility to say NO.

Yours in hope for a better future,
Michelle Barnes



Michelle Barnes 2020. Peaceful Glenaladale – no place for a noisy toxic mine.



Michelle Barnes 2020. NO MINE. Historic early 19th century building immediately south of the Fingerboards intersection. This site has non-Indigenous cultural heritage significance to locals. Kalbar's road diversions will wipe this area out.



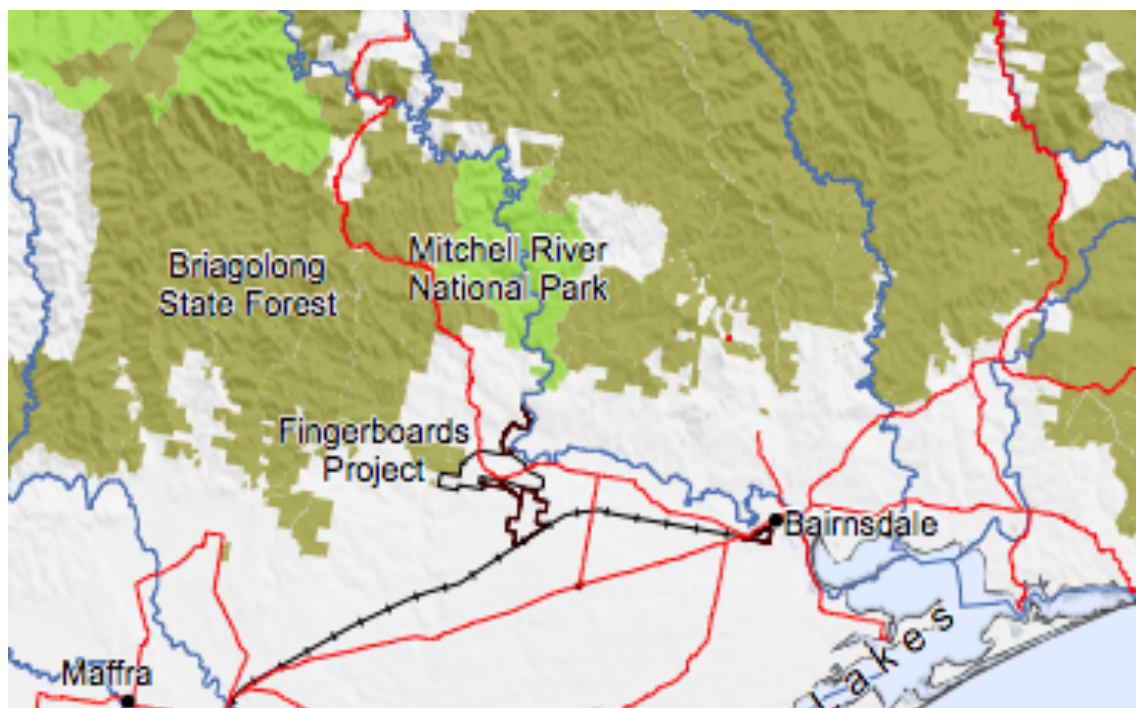
Michelle Barnes – Oct 2020. Carey's Road looking north-west towards Simpson Gully and areas proposed to be mined. This view is along a main tourist route to the Mitchell River National Park and attractions such as the Den of Nargun. Visual amenity impacts will be severe.

Article: Kalbar mine proposal sparks worries for Lindenow Valley vegetable farmers (ABC - 26 Oct 2020)

https://www.abc.net.au/news/2020-10-26/kalbar-mine-plan-stokes-fear-in-lindenow-valley-green-food-bowl/12782700?utm_medium=social&utm_content=sf239255245&utm_campaign=abc_gippsland&utm_source=m.facebook.com&sf239255245=1&fbclid=IwAR2QI0A8I2gHCqJnflmJx9PIRfdqFEeqE-GVspEEDZYZPNmHoUaAVnMQ0c

In the above article, Lindenow Valley vegetable farmer John Hine says:

The Mitchell River Valley produces about 30 per cent or 40 per cent of vegies down in Melbourne — we've got a very clean and green image in this valley, and any damage to that image will have a severe effect on our outlets.



Overview map of the Fingerboards mine project in a landscape context. It occupies a sizeable chunk of country, gouged out of the intensely fluvial Mitchell River landscape, with its complex surface and groundwater hydrology.

The Fingerboards mine proposal is an ill-conceived, poorly informed and dangerous idea. Kalbar's devastating proposal must not be approved.