Submission Cover Sheet

Fingerboards Mineral Sands Project Inquiry and Advisory Committee - EES

734

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

Full Name: Bumpy Favell

Organisation: Gippsland Environment Group

Affected property:

Attachment 1: GEG_submission_t

Attachment 2:

Attachment 3:

Comments: see attached submission

Gippsland
Environment Group
Inc

[redacted]
Clifton Creek Vic 3875

29 October 2020

Dear Inquiry and Advisory Committee members,

This submission from Gippsland Environment Group (GEG) is a response to the EES relating to the Fingerboards Kalbar Mineral sands mine project.

Gippsland Environment Group is a not-for-profit organisation, incorporated in 2006.
GEG has approximately 35 members, all residents of the local Gippsland area.
GEG focuses on the East Gippsland region to:

- Promote conservation values and environmental understanding
- Raise awareness of the threats the Gippsland environment faces
- Make representation to government regarding local environmental issues
- Carry out research on local environmental issues.

Gippsland Environment Group (GEG) strongly opposes the proposed Fingerboards Kalbar mine for the following reasons:

1. DESTRUCTION OF GUNNAIKURNAI CULTURAL HERITAGE

GEG are deeply concerned by the risks the mine poses to the cultural heritage of the GunnaiKurnai Traditional Owners and Custodians Not only the loss of cultural sites but also loss of connection across the landscape if this massive mine goes ahead. The project site is part of the Brabalung clan area and close to the Den of Nargun, Mitchell River rock shelters and a number of known burial grounds. The natural environment is a part of Gunnaikurnai cultural heritage. Gunnaikurnai have Native Title rights on the non-private land potentially to be mined. The remnant pre-invasion ecosystems that still persist on the roadsides and rail line must not be destroyed.

2. ECOLOGICALLY UNSUSTAINABLE

Removal of high value native vegetation:

- Kalbar proposes to destroy 1.74 ha of nationally significant ecological vegetation community Gippsland Red Gum Plains Grassy Woodland and Associated Native Grassland within the project footprint (along the Bairnsdale-Dargo and Fingerboards-Glenaladale roadsides); and an additional 5.64 ha in the infrastructure options area including along the rail-line at the proposed Fernbank East rail siding. (EES ch9 Table 9.2 & p 9-23).
  Proposed Fernbank East Rail siding Flora images 28.10.20 and 10.9.20

Roadside Flora Images:
Fingerboards-Glenaladale Roadside 24.10.20
Bairnsdale-Dargo Roadside and adjacent paddocks 24.10.20
Fingerboards intersection - Bairnsdale Dargo Road 24.10.20

The Federal EPBC Act 1999 Conservation Advice for the Gippsland Red Gum Plains Grassy Woodland and Associated Native Grasslands states*: The Gippsland Red Gum (Eucalyptus tereticornis subsp. mediana) Grassy Woodland and Associated Native Grassland is critically endangered. This ecological community is eligible for listing as critically endangered because it has undergone a very severe decline in extent, has a very restricted geographic distribution coupled with demonstrable threat and has undergone a reduction in community integrity that is very severe*.

Kalbar's EES states (9-23): *Removal of this area will not threaten the survival of this community or increase fragmentation*. GEG strongly disputes Kalbar's conclusion. This area is a critically endangered EVC and any loss to this EVC threatens its survival and increases the risk of extinction.

- Kalbar also proposes to destroy 11.57 ha of Victorian Flora and Fauna Guarantee (FFG) Act listed Forest Redgum Grassy Woodland ecological vegetation community. There is also potentially an additional 3.2 ha of the EVC to be destroyed.

- Kalbar's proposed removal of nearly 800 mature old trees is unacceptable. These trees are of the highest significance for biodiversity in the cleared landscape of the Gippsland red gum plains. These large old trees provide critical habitat for biodiversity and cannot be replaced.

- Kalbar proposes to offset its destruction of critically endangered Gippsland Red Gum Grassy Woodland and Associated Native Grassland by protecting areas of the EVC in nearby farmland. The use of offsets such as this one proposed by Kalbar will result in a net loss of the ecological vegetation community (EVC) in the landscape, even if there is an increased *area* of protection. GEG does not support the use of offsets for an EVC at serious risk of extinction.

- The grassland aspect of the critically endangered EVC which is found at the proposed Fernbank East rail siding is a subset of the EVC plant assemblage. Its significance is a consequence of rail line management– burning and not grazing. Studies by Ian Lunt[1] *demonstrates substantial differences in the botanical conservation of grassy forest remnants, which have been regularly grazed and rarely burnt, and rail-line, roadside and cemetery sites, which have been frequently burnt and ungrazed by stock for over 100 years*. The grassland occurring at this site cannot be offset in neighbouring farmland because it is a different plant assemblage.

[1] Ian Lunt, 1997, Effects of Long-term vegetation management on Remnant Grassy Forest and Anthropogenic Native Grassland in South-East Australia, Biological Conservation **81,** 287-297, p 291

- Kalbar has made conclusions about the lack of biodiversity in the farmland area of the proposed mine project area but their surveys have been inadequate. Kalbar have failed to recognise and identify the full extent of native vegetation in the Fingerboards area. One reason for this failure or ignorance could be that Kalbar's vegetation and targeted surveys were undertaken during severe drought, between June 2016 and September 2019 (EES ref 9.2.2.1). The three years prior to 2020 were the driest on record in East Gippsland. During 2020, with increased rainfall, GEG and local farmers have observed significant widespread flowering of native species on private farmland and on roadsides, particularly of native orchids and lilies. Significant flora recorded in the last month on roadsides and farmland within the proposed project footprint includes Purple beard Orchid, Sun Orchid, Tiger Orchid, Leopard Orchid, Chocolate Lily, Onion Orchid, Common Rice flower, Slender Tick-tree foil (K), Dissected New Holland Daisy (k).
  See images:
  Private farm, flora -2705 Bairnsdale -Dargo Rd 17.10.20 and 24.10.20

- Unlike Kalbar, other researchers have not found it difficult to identify significant native plants in the area. Ethos NRM reported to EG Shire Council in September 2019 on roadside native vegetation and ecological communities existing along the majority of Fernbank-Glenaladale Road, following concerns raised by GEG regarding roadside widening between Fingerboards and Glenaladale, involving clearing of native vegetation including large old trees.
  The Ethos NRM 19020 Environmental Management Plan Addendum states: *Extreme care is required during all roadworks along Fernbank-Glenaladale Road to avoid impacts to native vegetation (including native grass) and Nationally Significant ecological communities that exist along the majority of Fernbank-Glenaladale Road between Dargo Road to Friday Creek Road.*
  See reports: Fernbank- Glenaladale Rd.

- A population of rare Dissected New Holland Daisy – approx. 43 plants - has been recently (27.20.2020) identified on Carey's Lane roadside within the project footprint.
  See flora Images and Vic Flora information

Unacceptable risk to the catchments of Perry River and Mitchell River:

- The tailings dam is proposed to cover 90ha and the dam wall is proposed to be 20m above surrounding land, in highly erodible country. Construction on higher land between the two water catchments of the Providence Ponds-Perry River and the Mitchell River poses an extreme risk to the environment and to the safety of all residents of the area.

- The risk of failure of the proposed tailings dam, or of spillage is high. The likelihood of failure of the tailings storage facility poses an unacceptable risk to threatened species in the catchments and to the Ramsar listed Gippsland Lakes system. The Benambra mine tailings storage facility has continued to leak heavy metal contaminated tailings water into the Tambo River (another tributary of the

Gippsland Lakes) despite taxpayer funded remediation ($6.9mill) by the Department of Primary Industries in 2006. Tailings dams should not be constructed anywhere near a water catchment.

- The proposed tailings dam will contain highly toxic flocculants and sediment. Downstream of the proposed tailings dam site is the unique Honeysuckle Creek chain-of-ponds system, part of the Perry River-Providence Ponds geomorphological system. There is a significant aquatic vegetation community occurring in the ponds of Honeysuckle Creek upstream of Permit Track. Wetland vegetation present in the ponds includes water ribbons, water milfoil, pondweed; and bladderwort and rare orchids including *Ptersylis x ingens* occur in the grassy depressions between the ponds. Images of Honeysuckle Creek ponds and flora, upstream of Permit Track

- In the development of the mine Kalbar also proposes to excavate this section of Honeysuckle Creek, north of Permit Track, west of Boundary Track. Digging up this unique chain-of ponds system is unconscionable. West Gippsland CMA has invested $1.6 million into protecting the extremely rare Providence Ponds chains-of-ponds system, in an effort to restore the catchment. This sensitive waterway is habitat for nationally threatened Pygmy Perch and Dwarf Galaxia, Green and Golden Bell Frog. The Kalbar Mineral sands mine will pose a catastrophic risk to this catchment.

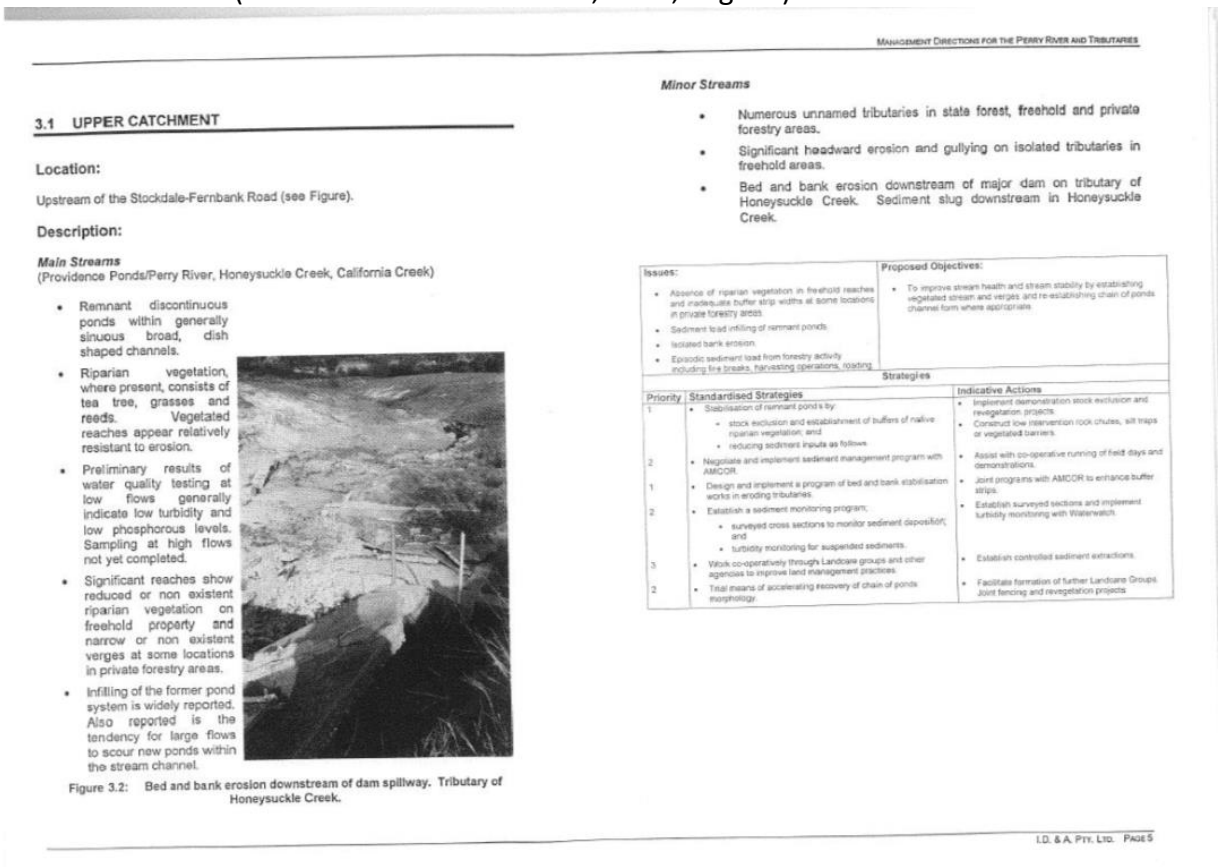
- This proposed mine would be a significant environmental impost on both the Mitchell River and the Perry River. The probability is that toxic mine waste will find its way into the waterways which are already under pressure from agricultural water extractions.

Risks of Erosion / Landform disturbance:

- 20 water storage dams are planned across the mine project area, 19 of them will be constructed across streams and drainage lines. This is an additional and massive erosion risk both during both the construction and in the potential failure of the dams. This is an area known for highly erodible soils.
  see *Tunnel Erosion in East Gippsland,* DPI, 2010

- Evidence of Erosion at Long Marsh Gully (a tributary of Moilun Ck, in the vicinity of the proposed tailings storage facility was clearly evident from Boundary Road, 25 October 2020 after 50 millimetres of rain**.**
  See images, Longmarsh Gully tributary adjacent north of tailings dam site 25.10.20

- The section of Honeysuckle Creek upstream of Permit Track that is proposed to be mined is at severe risk of erosion.
  See below (Drummond and Associates, 1995, Page 5.)[2]



MANAGEMENT DIRECTIONS FOR THE PERRY RIVER AND TRIBUTARIES

3.1 UPPER CATCHMENT

Location:

Upstream of the Stockdale-Fernbank Road (see Figure).

Description:

Main Streams
(Providence Ponds/Perry River, Honeysuckle Creek, California Creek)

- Remnant discontinuous ponds within generally sinuous broad, dish shaped channels.
- Riparian vegetation, where present, consists of tea tree, grasses and reeds. Vegetated reaches appear relatively resistant to erosion.
- Preliminary results of water quality testing at low flows generally indicate low turbidity and low phosphorous levels. Sampling at high flows not yet completed.
- Significant reaches show reduced or non existent riparian vegetation on freehold property and narrow or non existent verges at some locations in private forestry areas.
- Infilling of the former pond system is widely reported. Also reported is the tendency for large flows to scour new ponds within the stream channel.

Figure 3.2: Bed and bank erosion downstream of dam spillway. Tributary of Honeysuckle Creek.

Minor Streams

- Numerous unnamed tributaries in state forest, freehold and private forestry areas.
- Significant headward erosion and gullying on isolated tributaries in freehold areas.
- Bed and bank erosion downstream of major dam on tributary of Honeysuckle Creek. Sediment slug downstream in Honeysuckle Creek.

Issues:	Proposed Objectives:
• Absence of riparian vegetation in freehold reaches and inadequate buffer strip widths at some locations in private forestry areas. • Sediment load infilling of remnant ponds. • Isolated bank erosion. • Episodic sediment load from forestry activity including fire breaks, harvesting operations, roading.	• To improve stream health and stream stability by establishing vegetated stream and verges and re-establishing chain of ponds channel form where appropriate.

Strategies

Priority	Standardised Strategies	Indicative Actions

1	• Stabilisation of remnant pond s by:
	  • stock exclusion and establishment of buffers of native riparian vegetation; and
	  • reducing sediment inputs as follows.
		• Implement demonstration stock exclusion and revegetation projects.
		• Construct low intervention rock chutes, silt traps or vegetated barriers.

2	• Negotiate and implement sediment management program with AMCOR.	• Assist with co-operative running of field days and demonstrations.
1	• Design and implement a program of bed and bank stabilisation works in eroding tributaries.	• Joint programs with AMCOR to enhance buffer strips.

2	• Establish a sediment monitoring program;
	  • surveyed cross sections to monitor sediment deposition; and
	  • turbidity monitoring for suspended sediments.
		• Establish surveyed sections and implement turbidity monitoring with Waterwatch.

3	• Work co-operatively through Landcare groups and other agencies to improve land management practices.	• Establish controlled sediment extractions.
2	• Trial means of accelerating recovery of chain of ponds morphology.	• Facilitate formation of further Landcare Groups. Joint fencing and revegetation projects.

I.D. & A. PTY. LTD. PAGE 5

High volumes of water would be required to process the raw ore and suppress toxic dust:

- Using such large amounts of water just to suppress dust is a highly water wasteful act, irresponsible in these times of such a limited resource.

The mineral resources buried under this area are not 'rare':

- They are available in many other areas in Australia, further from Victoria's major vegetable growing area.

3. UNACCEPTABLE RISK TO VICTORIA'S MAJOR FRESH VEGETABLE GROWING AREA

- The potential of fresh food contamination from wind-blown dust over this well-established commercial vegetable growing area is unacceptable. Wind-blown radioactive dusts suggest the disastrous outcome that lies before local vegetable growers and their many years of farm development. Many have also worked hard to be registered as certified organic.

[2] Drummond & Associates, Lake Wellington Rivers Authority, 1995 - Management Directions in the Perry River Catchment,

- Mine use of local groundwater will limit the supply available to nearby farmers and vegetable growers. Using clean local water for growing fresh food employs multiple times more people.

- Long-time established farms will be forced off their land. Those remaining fringe farms will suffer the noise, toxic dust and visual scars of the mining process.

4. UNACCEPTABLE TO THE LOCAL COMMUNITY

- Toxic and radioactive dusts pose health risks to people living locally. Strong winds on hot days will occur, and locals can expect to be impacted adversely. Local households have no option for water collection other than rainwater. Wind-blown toxic dust will inevitably contaminate their water supply.

- Re-routing of the local roads around the mine site will create stress to locals. Local roads will experience heavy vehicle use, increased danger and roading surface abuse.

- Loss of local tourism in the area of a mine extracting toxic substances is expected.

5. DRAFT PLANNING SCHEME AMENDMENT

- It is unacceptable to allow compulsory acquisition of private land to be used for mine infrastructure located outside the mining project boundary; for water pipelines, bore pumps, bore field, roadworks, new power lines, easements, rail siding and vegetation removal. GEG is strongly opposed to the draft planning scheme amendment.

URGENT NOTE: GEG is alarmed that this week, 25 October 2020, a Kalbar exploration drilling rig entered private property by a back gate in the south east corner of 2705 Bairnsdale-Dargo Rd and proceeded through significant native vegetation (until they became bogged).

Kalbar had not undertaken an on-ground native vegetation assessment of this property prior to entry of the drill rig.

The southeast corner of this property contains native grassy woodland vegetation, major stands of old red box and yellow stringybark, kangaroo grass, wallaby grass, plume grass, and a glorious array of flowering plants including purple beard orchid, sun orchid, tiger orchid, chocolate lily, common rice flower, onion orchid, slender tick-trefoil etc.

We are aware that other nearby properties also with high value native vegetation are earmarked for further exploration work.
GEG was informed by Earth Resources Gippsland Acting Regional Manager that Kalbar has all the necessary permits for Low Impact Exploration Work.

GEG is concerned that this work is being undertaken without any on ground flora surveys and possibly only a desktop assessment by DELWP, in which case there is a real risk that significant flora including threatened species will be destroyed during the drilling exploration process.

In conclusion the Kalbar Mineral sands project will be a disaster for the community and the local environment and cannot be supported.

Yours sincerely,

John Hermans, Vice President, GEG

Bumpy Favell, Secretary GEG
[redacted]