



THE COLONG FOUNDATION FOR WILDERNESS LTD.

Friday 17 August, 2018

Snowy 2.0 Exploratory Works
NSW Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

SSI 18_9208

Dear Sir/Madam,

Submission as an Objection to the Exploratory Works for Snowy 2 as outlined in the Environmental Impact Statement (EIS) of July 2018

The Snowy Hydro scheme has a poor environmental track record. From commencement in 1949 to completion in 1974, its activities have had a serious adverse effect on the integrity of Kosciuszko National Park. Extensive areas of rare and precious alpine wilderness were destroyed. Snowy Hydro works, dams, aqueducts, waste heaps, towns, roads and powerlines have severely impacted and permanently degraded this national park, inflicting systematic and serial damage. Unsurprisingly, the Snowy 2 proposal will have significant and similar adverse impacts and this and the subsequent stages of this proposal are opposed.

This EIS for the Snowy 2 proposal fails to:

- Minimise its environmental footprint; and
- Adequately assess, avoid or minimise all potential impacts arising from the environmental hazards of the development.

The so-called Snowy 2 exploration proposal will bulldoze 95 hectares of Kosciuszko National Park, clear more unspecified or not offset bushland associated with 18.5km of road widening and 2km of new roads and two watercourse crossings.

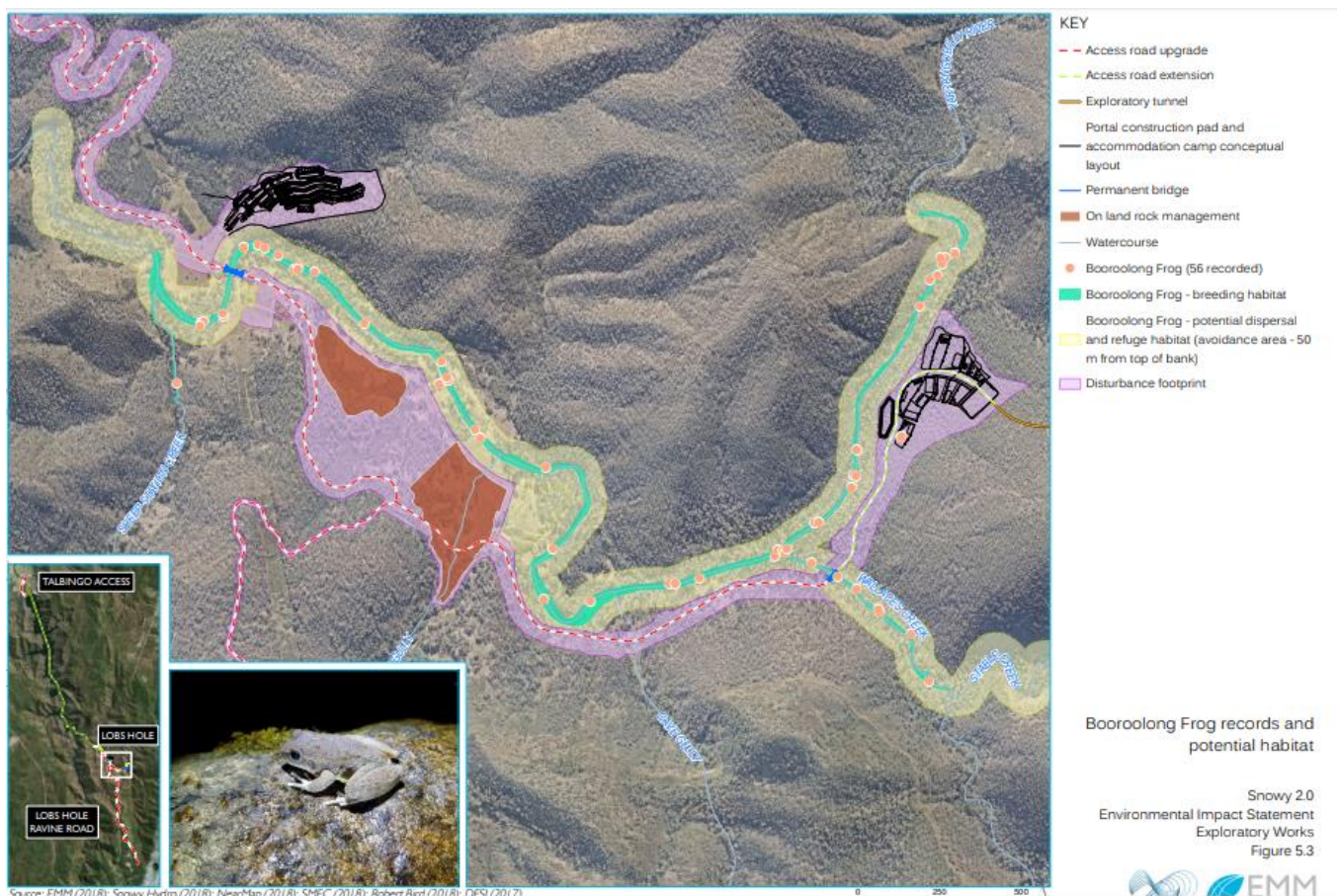
The Snowy Hydro has shortcut its environmental assessment for the project's proposed 4.4 kilometre, concrete-lined access tunnel, by asserting that the associated disturbance will not significantly impact National Heritage values. This opinion by the Hon. Melissa Price, the Federal Assistant Minister for the Environment, is inconsistent with national parks management and the survival of endangered species, including a nationally endangered frog. In addition, the potential impact of asbestos on workers and park visitors is not adequately considered, given that naturally occurring asbestos is present in the project area.

Impact on the Booroolong Frog

The Booroolong Frog (*Litoria booroolongensis*) is nationally listed as an endangered animal and recorded 56 times in streams that are likely to be affected by the development. The frog's habitat will be degraded with overflows from a sewage treatment plant located 50 metres from its riparian habitat (see figure 2.6). The EIS states 750,000 tonnes of rock, some of which is acid forming, is to be moved and 650,000 tonnes of this rock waste will be emplaced just 50 metres from this frog's habitat. A concrete batching plant is proposed at the portal construction pad that could contribute lime to the frog's habitat during periods of high rainfall or by industrial mishap. These contingencies and mitigation measures are not adequately addressed in the EIS.

The Federal Assistant Environment Minister decided that the proposal would have no likely significant impacts on matters of national heritage. This decision appears to be based on incorrect assertions by Snowy Hydro's officers or its consultants regarding observations of the frog and description of the proposed activities provided in the EIS. The conclusion of no significant risk to this endangered animal and its habitat is not credible given the combined risks detailed above.

A 50 metre buffer between the bushland clearing, road upgrades, portal construction pad, rock emplacement area, sewage treatment plant and the Yarrangobilly River will not ensure habitat protection for the frog. The simplistic impact assessment and mitigation in the EIS is not adequate for national heritage or a protection of a national park.



Sewage discharge, lime from the concrete batching plant and runoff from rock emplacement and clearing areas threaten the nationally endangered Booroolong Frog and its habitat.

Further, the clearing of 95 hectares (plus unspecified clearing for roads) of national heritage listed Eucalypt forest in Kosciuszko National Park is a significant impact. The Ministerial decision effectively devalues national heritage listing and its associated tenets as unworthy of Federal Government consideration. It prevents Federal review and elevated scrutiny when in fact such assessments are merited – as Snowy 2 is a major project proposed in a national park!

The primary purpose of national heritage listing is to ensure an elevated level of environmental assessment and impact mitigation. Dismissal of Federal review of impact consideration is against the intent of the EPBC Act and standing arrangements.

The Ministerial decision condemns a large endangered frog population to likely local extinction. The indirect impact of the proposal on over 70 hectares of habitat for five threatened species and the clearing of 95 hectares of forest is totally unacceptable in a heritage listed national park, especially when undertaken without scrutiny by Federal Government. And where are the adequate offsets itemised in the EIS to at least compensate for this loss? They do not exist, should not the Minister have been concerned about this? Should not the Federal Minister have asked to review the offset strategy before it is finalised and any impacts from Exploratory Works occur (see Vol 2, Appendix F)?

NSW Environment Groups do not support offsets. There are no go areas or mandatory like for like offsets for damage caused. In this proposal environmental protections for nature in a national park are swept aside for development. This sort of proposed activity cannot be supported by conservation groups as a matter of principle.

Unassessed risks of “subaqueous emplacement” of waste rock

Underwater disposal of waste rock is inappropriate if there is a risk of acid formation. Once disposed of in the reservoir there is no easy solution to remedy leaching rocks if they are subsequently found to contain acid forming material.

Furthermore, there is also a risk of asbestos type rock fibres, and the identification and handling of these materials must be undertaken according to strict protocols, if at all. Regional geology indicates that the rock waste will be dumped upon rocks with high asbestos potential. The possibility of mobilising asbestos sediments in Talbingo Dam and the risk of asbestos fibres in the waste rock extracted from the tunnel requires further consideration as a potential impact.

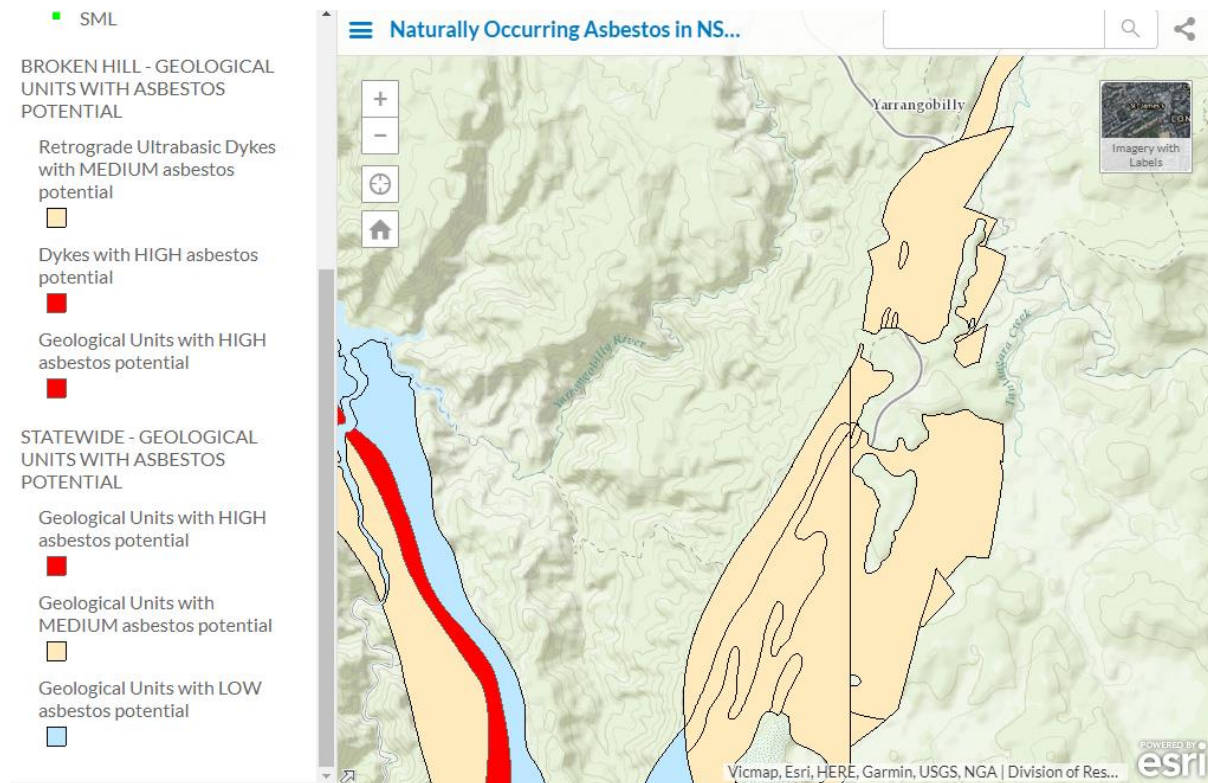
The rock waste is proposed to be fully submerged, not subaqueous – the proposed alternative strategy should be described as aqueous or underwater emplacement. If the emplacement was subaqueous, then it could not also occupy “dead storage” but reduce water storage behind the dam.

Naturally occurring asbestos (NOA)

It is not appropriate to cover the naturally occurring asbestos outcropping on the Upper Lobs Hole Ravine Road with gravel only. The asbestos must be sealed off from the environment so that it cannot generate dust. The environmental impact assessment should have mapped the areas with naturally occurring asbestos so that these may be avoided. The tunnel’s geological cross-section must consider the potential to intersect serpentinised rock which has asbestos fibre potential.

Worksafe NSW recommends activities be avoided that will generate dust from NOA areas. The EIS does not mention this advice or its equivalent. It is common knowledge that when asbestos is disturbed or worked with, asbestos fibres can be released into the air.

A belt of serpentinised rock with medium to high asbestos potential extends under the project area (see map). This map shows the outcrop – the asbestos associated with the geology at depth is a concern, particularly for the subsequent much larger pump storage tunnel project.



This image from Worksafe NSW indicates a higher natural asbestos hazard than indicated in the EIS

The area of medium risk serpentinised rock may be intersected underground, and that this contingency needs to be examined before tunnel quarrying commences. The map below only shows outcrop and not the trend of the asbestos hazard rocks underground.

Closure of public access to a vast unspecified area of national park and loss of visitor use

The EIS poorly explains that if Snowy 2 is approved it will entail the loss of public access for the duration of the project, to thousands of hectares of Kosciuszko National Park in the Ravine region, including a campground. This means that Snowy Hydro will take exclusive possession of a vast area of national park.

The EIS does not adequately explain the proposed level of use of the Ravine campground. A discussion is presented regarding ski resorts and other facilities irrelevant to visitors who use the Ravine campground and its environs. The EIS does not articulate how the Kosciuszko National Park plan of management 2006 is carefully crafted to ensure that the national park caters for all visitors. Without this context, the presentation of alternative recreation opportunities is not credible. It is also not appropriate for Snowy Hydro to suggest that other parts of Kosciuszko National Park be

opened up for 4WD vehicle users who visit the Ravine. The EIS consultants should not create visitor use expectations that can harm national park management of wilderness and other park management precincts.

Water-based summer recreation on the Yarrangobilly River and camping at Ravine has nothing to do with downhill snow sports at Charlotte Pass, Thredbo or Perisher. Ravine is a destination for 4WD vehicle recreational use. Most of the remarks in the recreation section are irrelevant or misleading, for example the comments on page 5.2-4.

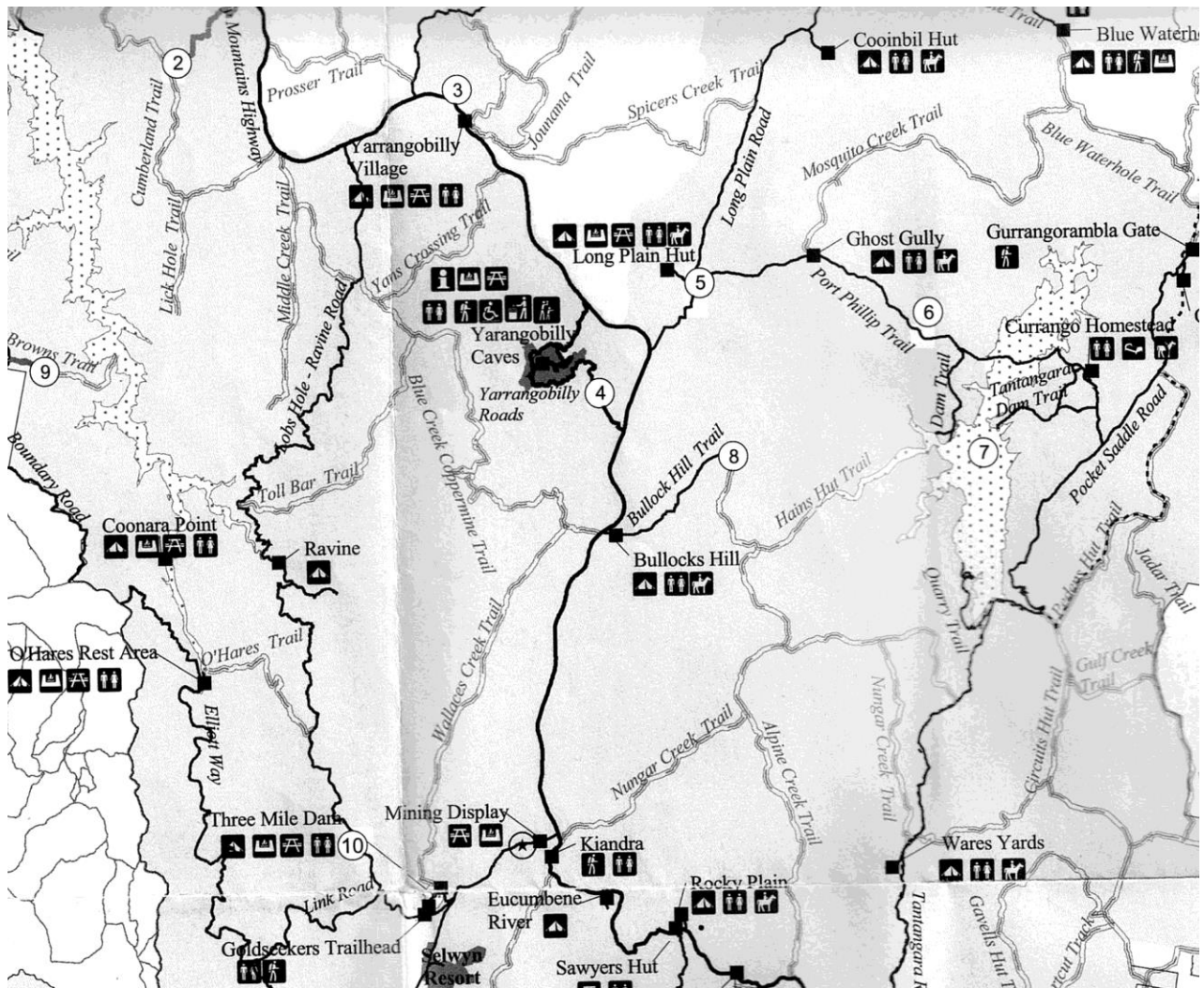
The Ravine campground is not clearly located in the EIS on a map of appropriate scale. For example, its location on Figure 5.4 indicating visitor facilities and roads is obscure. The figure in EIS can be interpreted as indicating that the campground location is one of the proposed two waste rock emplacement areas to be developed in the Ravine area.

Figure 5.4 does not show the access roads to the campground, indicated as public roads in the national park's 2006 management plan. This figure is misleading as it should be consistent with the plan of management map, and show more detail regarding the Ravine's locality. Figure 5.4 also omits the public road that extends from the Ravine north to the Snowy Mountains Highway.

The potential conversion of a campground into a waste heap, then a future campground is unfair on campers. Reinstating the campground on top of the waste rock emplacement is unsatisfactory (page 2-15). Camping facilities will not be improved in this way. The amenity of the Ravine setting after the waste rock emplacement is established will not be as good as the amenity that is there now. A main point of interest at the Ravine campground is the Yarrangobilly River. After this project is completed, campers can only access the river directly by descending through the proposed rock waste heap. Few campers will be prepared to descend to the river and the benefit of the river to them will be lost. None of this is mentioned in the EIS.

The EIS argues that the Ravine campground is little used and closure will not affect public access, see last paragraph on page 5.2-8. This is incorrect.

The EIS states on page 5.2-9 that "a number of minor roads and walking, biking and horse-riding tracks at Lobs Hole will be closed off to the public (where the way may interact with a construction site, such as a compound or laydown area). In these circumstances existing recreational tracks and trails may not be available for use by the public camping at Ravine campground will not be available (sic)." This will be an excellent example of Snowy Hydro's exclusive possession and consequent environmental disturbance!



Extract of Map 7 Visitor Facilities and Roads, Plan of Management, 2006

Page 5.2-9 poorly describes and understates the impact of this proposal on visitor use. It is wrong to claim that recreational facilities or users will not be close enough for the “modelled” infrastructure to be seen and also to state that users will have no access to existing tracks and a campground. If the campground and access tracks are to be replaced by a waste rock emplacement for the duration of the project, then visitors shall be denied access. References to the proximity of infrastructure are misleading when impacts will include denial of access to the national park.

Snowy Hydro does not propose to stabilise the old copper mine waste heap by the river or relocate it to one of the waste rock emplacement areas. Remediation of the old mine workings is the least that Snowy Hydro could do to improve the Ravine area.

Poor timing of environmental impact assessment in relation to the overall project

The entire Snowy 2 project is being brought forward in a piecemeal and ad hoc fashion and its true extent is not fully appreciated by the community at large. The complete project is power station, tunnels associated works, transmission lines from the power station to a new Talbingo substation and two power transmission lines, one heading towards Sydney and the other towards Melbourne.

If approved, the exploration project, a major engineering undertaking in itself, will see Snowy 2 commence before consent is granted for the project proper. In true “Alice in Wonderland” fashion it will be construction first and assessment later! Government expenditure will be locked in through the exploration works costing hundreds of millions of dollars before adequate consideration of the entire project has been undertaken.

It is clear that environmental assessment for the so-called exploration project has been shortcut. Regardless of reasons why, Snowy Hydro will be hoping that the multi-billion dollar project’s five subsequent stages, and the government funding that will be needed to bankroll them, will be *‘faits accomplis’*.

It must also be mentioned that Snowy Hydro does not intend to pay rent for the national park land over which it shall take exclusive possession. If the project goes ahead, Snowy Hydro must pay NPWS fair rent for what is leasehold occupation of the entire area over which it will claim exclusive possession. The small offset payment proposed in the EIS is demonstrably unfair – it denies significant national heritage and other environmental impacts in what amounts to a national park land grab.

To attempt to undertake this major project in such a piecemeal fashion, seeking a commitment from the Federal Government for vast financial investment before the community has been properly informed on all the consequences and the full range of alternatives to achieve the project’s stated goals (energy security, peak energy supply) is shameful.

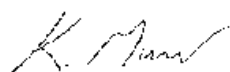
The process in which this project is being determined is reminiscent of the notorious NSW Planning provision, Part 3A, that allowed state Planning Ministers to determine a proposal and not be challenged regarding the scope, form and nature of the determination. These provisions apply to Critical State Significant Infrastructure and will, unfortunately, continue to cause administrative “errors” such as the likely local extinction that awaits the Booroolong Frog.

The Snowy 2 project’s future developments (major powerlines and pump storage) will be subject to four more separate environmental impact statements. This entire process is a cynical approach that will inevitably erode national parks and national heritage protection.

The Colong Foundation strongly objects to this proposal as inadequately assessed and incomplete and an inappropriate use for a national park. Those parts of the project as described will cause significant environmental impacts on Kosciuszko National Park and matters of national environmental significance. The proposal should be refused consent on these grounds.

Thank you for the opportunity to make a submission.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'K. Muir', with a stylized flourish at the end.

Keith Muir
Director
The Colong Foundation for Wilderness Ltd.

Reference

<http://www.safework.nsw.gov.au/health-and-safety/safety-topics-a-z/asbestos/naturally-occurring-asbestos/naturally-occurring-asbestos-publications/naturally-occurring-asbestos-faqs2>