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12 December 2022

TO WHOM IT MAY CONCERN

RE: HILLS OF GOLD WIND FARM APPLICATION NO. SSD-9679

- I am attaching my submission to the above mentioned development application
- I hereby declare that I object to the Hills of Gold Wind Farm proposal ID no. SSD 9679
- I would like my personal details withheld
- I have not made any reportable political donations in the previous 2 years

_____
Signature

SUBMISSION FOR OBJECTION

I hereby declare that I object to the Hills of Gold Windfarm proposal ID no. SSD-9679

SUBURB: Bolwarra Heights

REASON FOR OBJECTION:

I have reviewed the amended development application and foresee extensive negative environmental impacts that far outweigh any economic benefits regionally. My reasons for objecting to this project are as follows;

1. The loss of 190.55 hectares of native vegetation including 46.2 ha of identified Koala habitat due to clearing for the development is unacceptable. Of the native vegetation to be cleared, two types are State Listed Threatened Ecological Communities (TECs) – a) the White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Box Gum Woodland, Critically Endangered) and b) the Ribbon Gum – Mountain Gum – Snow Gum Grassy Forest/Woodland (Endangered). Also directly impacted will be two Nationally Listed Critically Endangered Ecological Communities (CEEC) – a) the White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Box Gum Woodland) and b) Threatened Ecological Community Ben Halls Gap Nature Reserve Sphagnum Moss Cool Temperate Rainforest (upgraded to endangered on 5th October 2022).

2. Clearing and construction of planned WTGs are continuing to be planned along the boundary of the Ben Halls Gap Nature Reserve. The placement of these wind turbines is not acceptable due to the high risk of bird and bat strike by the turbine blades while foraging and migrating between roosts and breeding sites. Large Bent-wing Bat populations migrate regionally on flight paths between significant roost sites at Barrington Cave (Tomalla), Main Cave (Timor); Barry Cave (Barry Station) and Crawney Pass Caves. Barrington Cave has in the past been observed to have hundreds to thousands (numbers are seasonal as they migrate between sites) of individual Large Bent-wing Bats (Rutledge in Rutledge, J. 2003; Helman in Rutledge, M. 2002; Scott in Rutledge, M. 2001).

   Large Bent-wing Bats will be significantly impacted by this development because;

   - They are listed as a vulnerable species in NSW
   - Significant populations move between Main Cave at Timor to other karst areas regionally (see examples in figure 1 below)
   - They hunt in forested areas at height, above the tree tops where the blades are spinning.

The amended development plan does not sufficiently mitigate the risk to this vulnerable species, nor does any proposed monitoring program avoid the deaths to occur in the first place.

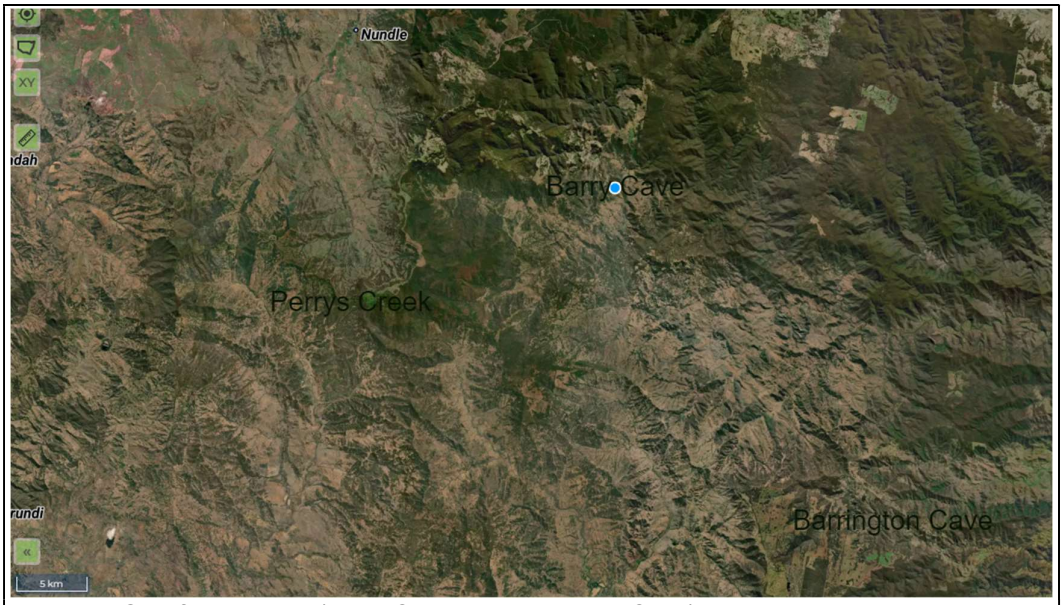


Figure 1. Significant caves (Barry Cave and Barrington Cave) used by bat populations migrating seasonally from Timor and Crawney Caves near Perrys Creek/Isis River.

3. The impact upon threatened bat species such as the Eastern False Pipistrelle, Eastern Coastal Free-tailed Bat and Yellow-bellied Sheathtail-bat would be substantial due to the loss of suitable habitat. The amended application has failed to reduce this loss significantly.

   The Yellow-bellied Sheathtail-bat and Eastern False Pipistrelle relies on mature hollow-bearing trees offered by the native forest woodlands along those ridges. Likewise, the Eastern Coastal Free-tailed Bat relies on mature trees with hollows or loose bark to roost under. Loss of suitable habitat is unacceptable to these vulnerable species.

4. The amended application illustrates significant and foreseeable damage to river systems caused through erosion of soils along the ridgeline particularly at the headwaters of Perrys Creek and Dead Eye Creek (fig. 2 and 3). Both of these creeks actively flow into the Isis River and into the Timor Karst system that contains a network of caves adjacent to the Isis River. 8 wind turbines each with a 500-900 cubic meters of estimated soil/rock displacement plus the construction of ridge top internal access roads and the construction of the BESS & Substation (near WP20), will displace tonnes of soil into this river catchment endangering the caves and karst system. The environmental impact on the karst, river health and water quality is unacceptable.

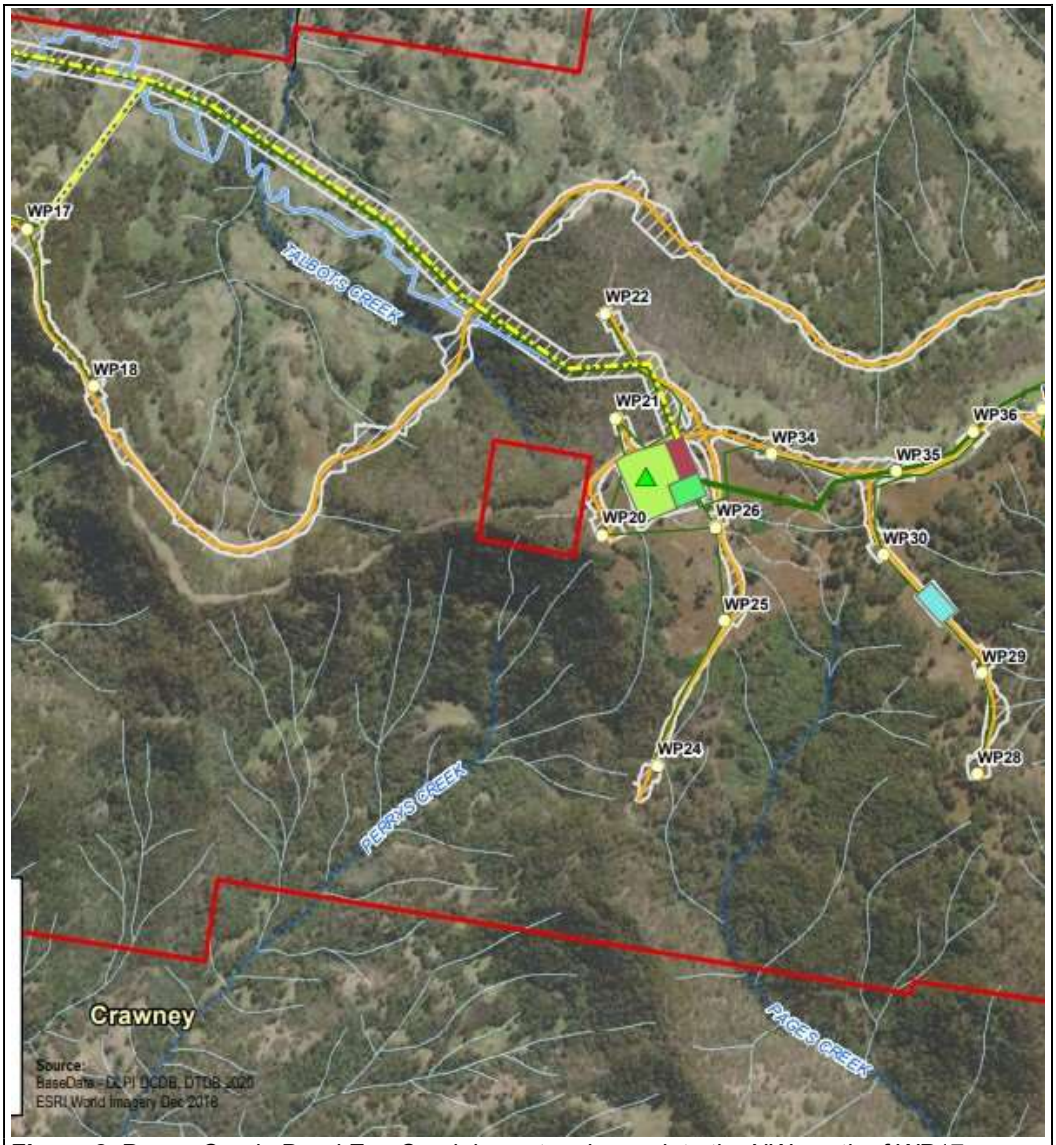


Figure 2. Perrys Creek. Dead Eye Creek is next main creek to the NW south of WP17. Figure 3-3

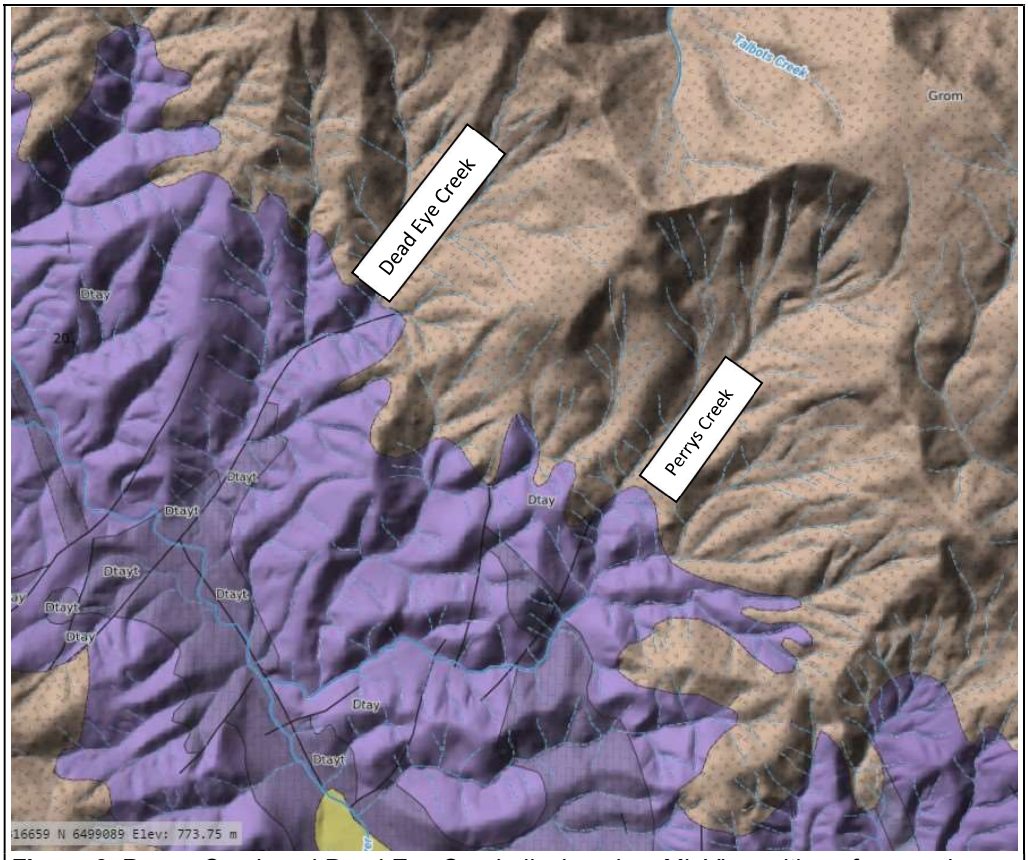


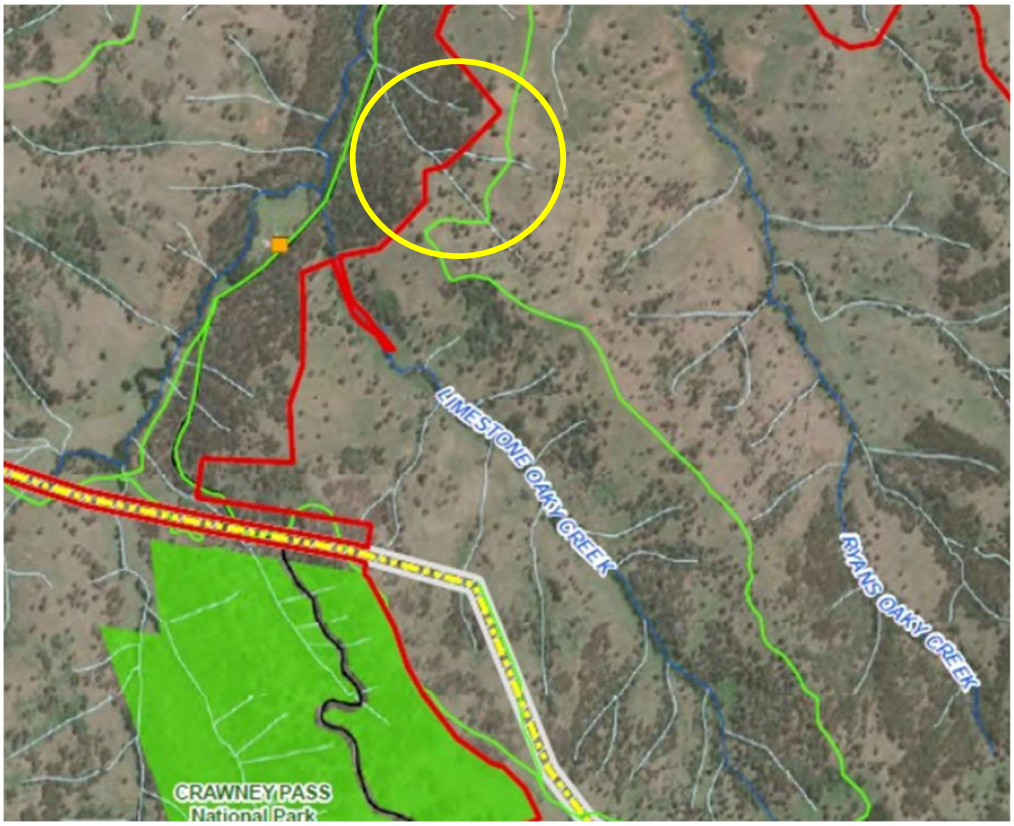
Figure 3. Perrys Creek and Dead Eye Creek displayed on MinView with surface geology. Timor Limestone (Dtay) hosting the karst environment shown on NSW Surface Geology.

5. I particularly object to the construction of the newly proposed Teamsters Rest access road and internal western access road from the Crawney-Nundle Road along the northern edge of the Crawney Karst. The caves are located in the perennial creek north of Limestone Oaky Creek and have two gullies feeding into this creek-line that are directly affected by the internal road construction (see Fig. 4 and map below with area affected circled in yellow).

   I am concerned that the clearing and road construction will cause erosion leading to the transfer of silt downstream into the caves. Caves are important sites supporting ecological communities vulnerable to this type of development.

   Seven caves are currently known to exist here in this drainage gully. The caves contain many features of significant geoheritage value, such as speleothems (flowstones, stalactites and stalagmites), vast tree roots have grown into the caves providing habitat for cave-adapted faunas, roosting avens for bats, and fossil bone material which is yet to be studied scientifically.

Figure 4 below- Creek lines containing the Crawney Caves



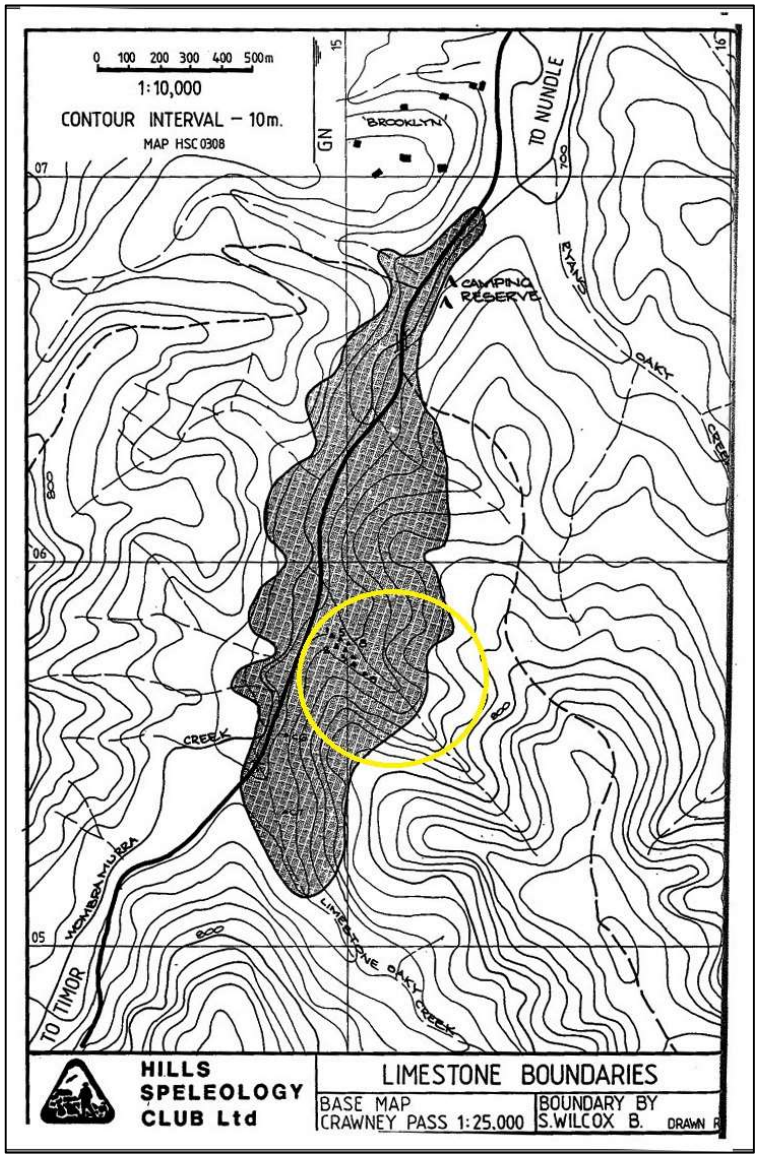


Figure 5. Cave location map.

In closing, I object to this development on the many grounds as discussed.

References

Helman, M. in Rutledge, M. 2002, (Ed.) Gloucester and Barrington Caves in *Newcaves Chronicles, No. 18*, Newcastle & Hunter Valley Speleological Society.

Rutledge, J. in Rutledge, J. 2003, (Ed.) Barrington Cave on the Pigna Barney Karst in *Newcaves Chronicles, No. 20*, Newcastle & Hunter Valley Speleological Society.

Scott, D. in Rutledge, M. 2001, (Ed.) Barry Cave (BA1) Barry, NSW in *Newcaves Chronicles, No. 17*, Newcastle & Hunter Valley Speleological Society.

Wilcox, S & Pinnock, R.1990, A Guide to Crawney Pass Caves, Hills Speleological Club Ltd.