Jodie Rutledge 118 Bolwarra Park Drive, Bolwarra Heights 2320

Direct- Energy Assessments Planning and Assessment Department of Planning, Industry and Environment Locked Bag 5022 Parramatta. NSW 2124

26th January 2021

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

Jodie Rutledge Signature

SUBMISSION FOR OBJECTION

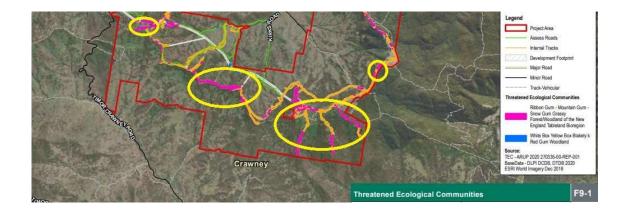
I hereby declare that I object to the Hills of Gold Windfarm proposal ID no. SSD-9679

SUBURB: Bolwarra Heights

REASON FOR OBJECTION:

I have been visiting the Timor area for over 20 years and am an active member of the local caving club. My ancestors lived in Nundle and I still have family in Hanging Rock and nearby Murrurrundi. I have a strong personal connection to the natural environment of the region, this includes the karst and caves, river valleys and ridges. Now along with my husband and young daughter, we often visit the region to enjoy bushwalking, caving, swimming and wildlife spotting. My reasons for my objection to this project are as follows;

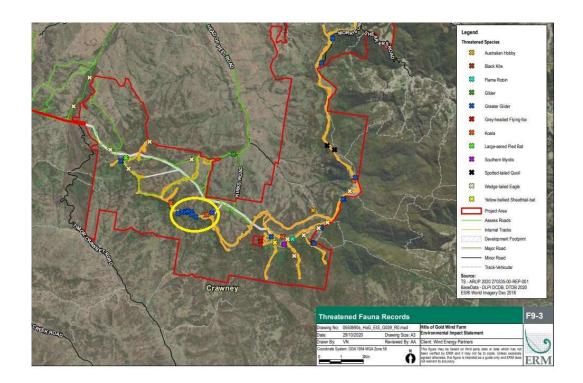
- The visual impact of the Wind Turbine Generators (WTGs) looking north from the Timor Valley (WTGs 1-40) noted in figure 2 of the Landscape & Visual Impact Assessment (along the ridge east of Crawney Pass) is too significant for this project to go ahead. The residents of the Timor valley and visitors to the area would have their visitor experience severely impacted.
- 2. The loss of 206.70 hectares of native vegetation due to clearing for the development is unacceptable. In particular, the Ribbon Gum-Mountain Gum-Snow Gum Grassy Forest/Woodland identified along the ridgelines correspond with sightings of many important species identified during the fauna survey. These being the Greater Glider, Koala, spotted-tailed Quoll and many bat species (detailed further below). This ecological Forest/Woodland community is clearly an important habitat for these species. Areas referred to are circled below in yellow.



3. Loss of Greater Glider habitat along the ridge where the WTGs are planned to be installed is unacceptable. There was a particularly high cluster of Greater Gliders noted at the WTG site 15, 16 & 17. Area circle below in yellow.

Continued survival of this population is dependent on suitably "connected" stands of trees, they feed exclusively on eucalypt leaves, buds, flowers and mistletoe; and are reliant on tree hollows to shelter in during the day. Many hollows are required in their home range and each individual has a home range of only 1-3 ha. They are reported to be very loyal to their territory.

(https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=20056)



I object to the destruction of this Greater Glider habitat and consider this development's economic benefits to not be worth the likely loss of this Greater Glider population.

- 4. Likewise, I object to this development due to the loss of habitat for the spotted-tailed Quoll. This is a vulnerable species that relies on tree hollows to shelter in during the day. Nationally this species is considered endangered.
- **5.** Koalas, listed as a Vulnerable species in NSW were sighted close to the site noted in the figure above with the Greater Gliders near the WTG sites 15, 16 & 17 and further along the ridge to the east. The loss of habitat due to clearing along this ridgeline is

unacceptable and like the Greater Glider, this species also relies on the eucalypt leaves exclusively for sustenance.

6. The impact on threatened bat species identified in the Environmental Impact Statement (EIS), such as the Eastern False Pipistrelle, Eastern Coastal Free-tailed Bat and Yellow-bellied Sheathtail-bat would be substantial.

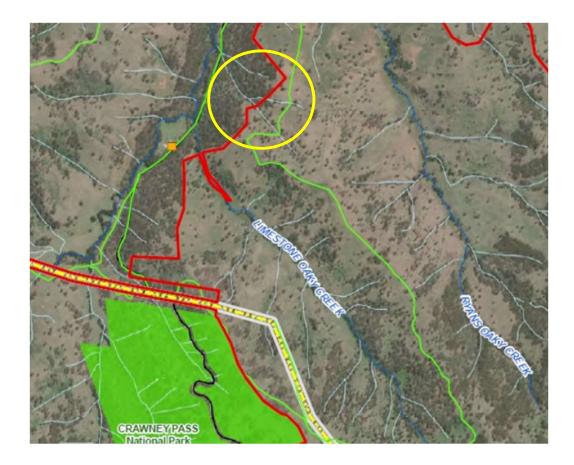
The Yellow-bellied Sheathtail-bat and Eastern False Pipistrelle relies on mature hollow-bearing trees offered by the native forest woodlands along those ridges. Likewise, the Eastern Coastal Free-tailed Bat relies on mature trees with hollows or loose bark to roost under. Loss of suitable habitat is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

7. I am particularly concerned about the impact this development would have on the Large Bent-wing Bat population regionally on flight paths between the 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).

I object to this development due to the likely blade strike of these vulnerable bat species while foraging and migrating between these breeding sites. The EIS does not take into account the impact of migration between breeding sites (caves).

- 8. Horse-shoe Bats (*Rhinolophus megaphyllus*) are not mentioned in the report, yet they have regularly been observed in the caves in the region. Significant numbers have been noted in Barrington Cave and like the Large Bent-wing Bat species, they are also at risk of blade strike while migrating between sites.
- 9. I object to this development due to the likely death of raptor birds caused by blade strike. The estimated collisions given in the environmental impact statement are grossly underestimated considering the number of Wedge-tailed Eagles and Nankeen Kestrels regularly seen in this area.

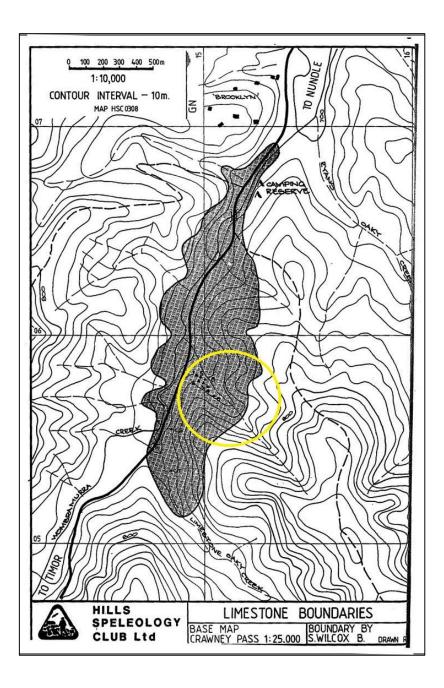
- **10.** I object to this development because the no-fly zones associated with the WTGs restrict firefighting capabilities in this steep terrain. Firefighting from the air is the only viable and effective option in this type of topography.
- 11. I object to the amount of damage to the karst and related hydrological karst systems caused through silting by erosion at the development site. I particularly object to the construction of the western access road from the Crawney-Nundle Road adjacent to the Crawney Karst and cave systems. 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 road construction (see image below with area affected circled in yellow). Clearing and road construction would cause erosion leading to the transfer of silt downstream into the caves in times of rain. Caves are important sites supporting ecological communities vulnerable to this type of development.

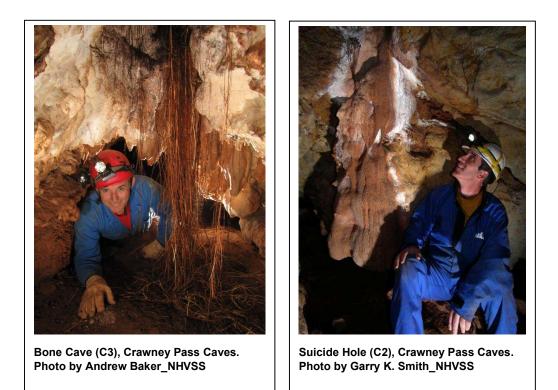


Seven caves are currently known to exist here in this drainage gully. The caves contain many features of significant geoheritage value, such as speleothems (flowstones, stalactites and stalagmites), vast tree roots have grown into the caves providing habitat

for cave-adapted faunas, roosting avens for bats, and fossil bone material which is yet to be studied scientifically.

The limestone boundaries and cave locations are given below with the area of concern circled in yellow (Wilcox and Pinnock, 1990). Two photographs are also provided below to demonstrate some of the karst values present in these caves.





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

I **do not** believe that the loss of biodiversity and Geoheritage values can be mitigated sufficiently to allow this development to go ahead in the present location.

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.