

Project name: Shoalhaven Hydro Expansion Project-Main Works Application
number: SSI-10033 Submission by Linda Obern regarding the proposed expansion.

29th November 2022

I reside at 407B Bendeela Road and have done so for over eighteen years, the residence is around 20 years old, being built post construction of Bendeela Power station. I acknowledge the opportunity to make this submission and confirm that I object and am **totally opposed to the proposed project**.

1. *Section 1.1 of the NSW Government, Exhibition of Critical State Infrastructure Application document states: 'The existing scheme was designed to allow for expansion'*

If this proposed expansion was always indeed the case, why were residential dwellings that will be adversely affected by the project allowed to proceed unopposed, and not informed of these future plans by either NSW Water, Origin Energy or NSW State Government?

NSW Water has profited directly from the sale of this land on which 407A, 407B, and 407D now stand, and the home owners at these properties are now facing this proposed development causing visual, audible, mental and financial impacts on their homes and business, that if approved, will be hugely impacted by this submission.

2. *Section 2.4.5 of the Environmental Impact Statement (EIS) states that landholdings surrounding the construction site consist of 'isolated dwellings'*

This language is misleading as it suggests nearby residences are

scattered sparsely across a wide area, whereas the reality is that at least 16 residences are within one thousand metres or less, of the site, two of these homes constructed within the last four years. Scots College Campus, which houses 80 students plus staff, is within 500 metres.

3. The NSW Government document: Exhibition of Critical State Infrastructure Application . Section 3 Project Description. 3.1 Overview. Lists 'cost' as a factor in allowing alteration to 'the main elements of the project', during design or construction.

So any aspect of the project is subject to alteration at any stage if a cheaper alternative that benefits Origin is deemed appropriate by Origin.

For example: The EIS no longer mentions the use of quieter conveyor belt systems to move spoil, obviously this method has been ditched in preference of noisier, dust polluting, environmentally disruptive, noisier, but cost reducing for Origin, trucks running 24/7 past these occupied residences.

Construction is anticipated to last 5 years. This time frame assumes no delays from weather, landslips, road conditions, fires, covid, which may well extend this project for another 2 years or more (at more cost of taxpayers money). At best it means

4. Devaluation to both the local amenity and value of local residents properties for at least five years and likely longer. The freedom to sell affected properties at market value usually applicable to Kangaroo Valley will be damaged during this construction. For many of the residents approaching retirement age, whose house value forms a large proportion of their retirement fund, this is a financial disaster. For those

younger with young families or business income, the health issues and financial loss is equally disastrous.

5. The NSW Government Commonwealth policy context under the heading; *The Governments current climate change plan includes.. States one of its aims as: 'Helping expand and protect green spaces'*. I contend that covering up to 29 hectares both pre existing and regenerated semi-mature (approximately 45 years old) bush land with 420,000 cubic metres , of loose excavated spoil from tunneling works (7.2.1), neither expands nor protects the green spaces relevant to the Commonwealth Governments stated policy.

"The 1st greatest threat to biodiversity is habitat loss" – *Conservation Ecology*.

Kangaroo Valley, and in particular, Jacks Corner Road and Lower Bendeela Rd were severely hit by the 2020 fires, decimating properties totally, leaving no live vegetation, or any wildlife. These property owners have fought through complex insurance and grants to assist them to rebuild their homes whilst footing the cost of renting for more than 2 years whilst their homes were rebuilt. Origin did not inform these residents that their new build homes would be affected by a submission for this project, nor any mention of any future work to be commenced that would affect their new homes.

The community formed a wildlife initiative group to support the wildlife for over a year, dropping daily food and water stations to support any surviving natives that if not burnt evolved to a total wipe out of all they knew. The vegetation has still not totally recovered in some areas, and

weed infestation, has been tirelessly removed by the residents.

Following the fires, Kangaroo Valley had massive floods, impacting the flora and Fauna even further, wombats drowned that had survived the fires, as many of the ground dwelling natives did.

6. I reside at 407B Bendeela Road and have run a wildlife sanctuary for over 13 years, taking in injured and orphaned wildlife to rehabilitate and release. The sanctuary is supported by, The Wombat Protection Society of Australia, (of which in the past I have been a director), The Humane Society International and Wildlife Rescue South Coast. During this time we have taken in burnt and injured wombats from the fires, orphaned wildlife from floods and lately a huge influx of orphaned injured wildlife and checked multiple roadkill in Jacks Corner road and Bendeela Rd, due to increased trade vehicles and trucks attending the power station where clearing rock seems to have commenced regardless of the submission not being passed to date.

On 8^{8.22} I contacted Shoalhaven Council via e mail complaints, as we were experiencing constant road noise, trucks every 30 minutes, reverse beeping, from large trucks passing our residence at night, depositing large rock spill into the NSW depot that sits between 407A and 407D Bendeela Rd, creating a sound that was very disturbing, traveling great distances due to the valley we live along, and causing disruptive sleep. The wombat roadkill was increased at this time, many familiar to us as they live on the NSW land (about to be destroyed and cleared for spill, that transition nightly across to our sanctuary at night to feed on grass.

The response from the council was this noise was due to water NSW and not a council issue? **On 12.8.22** I contacted Water NSW complaints via e mail, case number **CS0474161**, to which I received an automated response saying someone will assist me soon? I have yet to hear from them in regard to this noise issue, **now Nov 22**. This noise was obviously works being carried out in the fashion that we are told to expect over 5 years? This noise level is not tolerable to wildlife or residents, and the lack of response from Water NSW and council is unacceptable, and concerning for possible future issues.

7. Section 6.8.3.1 of the EIS contains a table of residences that will be adversely affected by construction noise levels above those usually present in the locality. My residence is not included on the list despite being less than 200m from this project.

The United Nation Convention of biological diversity states that there are 5 current threats to native species.

- 1. Land changes** – clearing 29 hectares of land that has survived fires and floods had regenerated to become home to numerous ground/rock dwelling natives, wombat burrows, Kangaroo habitat, bird life and flora contravenes the ‘Green’ label this submission uses. I contend that covering up to 29 hectares both pre existing and regenerated semi-mature (approximately 45 years old) bush land with 420,000 cubic metres , of loose excavated spoil from tunneling works (7.2.1), neither expands nor protects the green spaces relevant to the Commonwealth Governments stated policy.

- 2. Exploitation of natural resources** – blasting, ground tremors, spill contamination, dust and increased noise is not Green.
- 3. Climate Change**- continuous fire and flood predictions, with regrowth and habitation of native flora and fauna struggling to survive will not stand any chance in this area if creating the tunnels and haulage issues commence. The illusion of this being a green project with the minimal outage it will produce compared to the destruction of the struggling wildlife and vegetation does not equate to being Green in Kangaroo Valley. Other sites that are more suitable within Origins remit, where destruction of the surrounding areas has already occurred and unlikely to regenerate is a greener alternative.
- 4. Pollution** – The **noise** that these works will create in an area that has little or no noise daytime, a few cars, (these roads are dead ends, therefore apart from residents and campers there is no traffic,) and no noise at night, bar the native calls of birds, and wombats, the increase of noise in any shape or form from dusk to dawn will have severe impact on both wildlife and residents. Trucks and heavy traffic 24/7 will eradicate the wildlife that roam from the paddocks and roads as they transition from burrows and rest sites to feeding grounds, many with young at heel will be killed. Others will move away from the territory they have been born on, and will try to relocate in another's territory, which results in territorial fights and death for the newcomer.

Dust- the fine dust that will pollute the air, which at present is clean, will sit on trees and grass, will affect growth and if cement dust, has a carcinogenic risk.

5. Invasive species – non native fauna and flora became a large issue when land change occurred post fires and floods. Predation on natives from Fox, feral cats were problematic as was prolific weed growth proving very difficult to eradicate.

Australia has one of the worst extinction records in the world, this dressed up, politically assisted for NSW votes 'green' project is impacting a renown area of outstanding beauty. Tourists and residents flock here to enjoy peace and tranquility, to enjoy the vast pristine bush land, the solitude and peace, the ability to view wildlife that barely exists now in urban areas, already destroyed by buildings and land development, never to return to its origins.

On our property alone we have gang gangs, glossy black cockatoos, bandicoots, bare nosed wombats, eastern grey kangaroos, red neck wallabies, swamp wallabies, mountain possums, king parrots and so many more species to mention. The noise, air pollution, excessive and constant traffic, huge rock spill and land clearance will disrupt this rare gathering of Australian wildlife, that is all under threat of future extinction if projects such as this Origin submission is allowed to be passed. The prediction for Australia in 2050 is more intense fires and floods, therefore reducing our native wildlife further by climate changes, without any human intervention of destruction of habitat.

I am a green supporter, vegetarian, wildlife carer and refuge owner, and believe coal emissions need to be reduced. I support electric powered cars and understand that power needs alternatives, but not at the destruction of pristine bush land and native wildlife habitat destruction, when alternatives sites can be used that will not have this massive impact. A study at the **Australian National University**, published in ***The Conversation*** 11th November 2022. Identifies over 3000 low cost potential sites around Australia, where installation of pumped hydro facilities are an option. Capable of providing 300 times more supply than required in Australia. Of these sites there must be many that can be developed without the huge environmental and social drawbacks inherent in the Shoalhaven scheme.

8. The Environmental Impact Statement uses wind monitoring statistics from Nowra, Albion Park and Moss Vale all of which have totally different topography to Kangaroo Valley.

If the data is not collected in Kangaroo Valley then any conclusions drawn from are flawed.

My house and that of my immediate neighbour's are reliant on tank water for all of our water needs, I believe this to be the same for all residents of Jack's Corner Road. Any dust from construction work will cause a deterioration in the quality and safety of water which is collected from our roofs. It is unclear from the EIS whether concrete will be mixed at the batching plant, if this is to be the case dust generated during the process appears to have been omitted from air quality calculations. Should dust enter our water tanks and be absorbed

internally, enter our homes via washing lines, swimming pool water etc and residents are diagnosed with cancers affiliated to this contamination, are Origin and NSW water, or state government prepared for medical litigation? Over such protracted time of this project so close to residential homes this needs to be considered.

9. Greenhouse Gas emissions Production and use of concrete is a major contributor to greenhouse gas emissions, the EIS assumes 97,500 tCO₂-e. This huge addition to greenhouse gas emissions will contribute to climate change.

In fact operation of the completed plant will result in net carbon emissions due to drawdown of power from the National Electricity Market, (NEM) At the recent information day the chief engineer stated that carbon emissions will fall over time as battery storage from wind and solar contributions to the NEM are used to power the plant. Why available power generated by wind and solar and stored in batteries would not be pushed directly into the grid, rather than diverted to a facility that is so inefficient to run that it loses 20% of the energy it produces.

More energy is used pumping water up hill than is generated during its flow down to the turbine. The Australian Parliament website quotes from an Australian University study that '*20% of pumped hydro power is lost*'.

13% of CO₂ that will be released during construction is caused by the destruction of a large 29hectare area of vegetation being cleared. No

calculation appears to have been made detailing the net loss of yearly carbon capture capacity due this vegetation removal and destruction.

The carbon capture and storage, at no cost, being performed at the proposed clearance site has in some areas taken since the late 1970s to regenerate, this important resource is now to be destroyed to enable Origin Energy to make profits.

The ***Australian Chief Scientist website***, gives a figure of 0.5 - 2 tonnes carbon capture per hectare per annum for tree covered areas and grassland. Not a huge amount but at least a net reduction in carbon at this time rather than the net increase promised in even the best case scenario by Origins power station, and that best case scenario only to be achieved by 2050.

10 Mental Health

Nothing in this submission by Origin takes into account residents mental health following the possibility of such a long duration of noise, pollution and disruption to a pristine residential area that has been put forward in their submission, nor of residents who suffer with asthma or lung issues, of which my husband has both. Many residents that live in this area that are affected by this are elderly, and the possibility is their last years, thought to be quiet and enjoyable will be destroyed by this project, instead of enjoying retirement, peace and security, they will endure pollution, dust, 24/7 noise, sleepless nights and financial hardships should they try to move away as no income is forthcoming except via their home value. The new younger generation that work from home due to covid change and have stretched their finances to buy or build family homes planned to be rural peace and healthy for their children

to grow and play are now faced with crippling mortgages and no means of selling without loss, plus concerns for their children's health over the next 5 to 7 years.

Finally the effect on residents that run business from these properties, yoga retreats, wedding venues and air b&b s will suffer immense financial loss. Who wants to stay or be married with truck tipping rock next door, or dust invading their special day or to hope to relax at a retreat? Or our wildlife sanctuary housing stressed wildlife (if any survive the road kill statistics or land clearance, blasting soil causing burrows to collapse and suffocating slowly to death trapped, in a noisy frightening environment instead of a quiet natural wildlife environment they are entitled to have.

Many residents work on the river and camp grounds where tourists flock to canoe and camp, who are being told the access will not change during this project, yet in Origins submission there is reference to some closures due to dust and noise, danger from tipping etc. Tourists may avoid the Valley and the road access into and out of the Valley will be sorely pushed to sustain the constant influx of trades and trucks coming and going. The Hampdon bridge newly repaired will deteriorate faster than anticipated, and the narrow Bendeela road and Jacks corner road, already suffering from pot holes and speeding tradies and heavy trucks, will need constant repair and a reduced speed limit from 80 to 50kph to try and reduce road kill .

The loss of the positive image of Kangaroo Valley as a scenic rural haven away from the trauma of the outside world will likely be damaged for years beyond the completion of construction.

11.Conclusion.

The proposed Shoalhaven Hydro Expansion is an ill conceived, badly planned project, the EIS for which is littered with contradictions and totally biased toward the profit driven rationale of Origin Energy. It illustrates completely that: The primary purpose of new infrastructure is to enrich the people who commission or build it. It will not inspire residents to vote liberal in the coming electorate but damage their image by financing this not green project for Origins financial gain over constituents and environmental well being.

Thank you for reading this submission.