

Louise Williams –

**The current EIS should be withdrawn due to outdated and incomplete data and the absence of detailed evidence-based mitigation measures for numerous serious immediate and long term impacts.** These impacts will impose heavy burdens on residents, schools and businesses over many years and lead to irreversible environmental losses on the northern beaches. **A new EIS should be undertaken using up to date data and responding to the many concerns raised during this consultation process.**

**This project is too important to rush through with such an unprofessional ‘she’ll be right’ attitude as it will irrecoverably change the face of the northern beaches through increased development and with it, the natural environment, that currently characterises the LGA.**

**My submission is neither for, nor against, a tunnel per se.** It is, however, **strongly opposed to the project as described in the EIS.** The EIS demonstrates that the impacts of the planned tunnel have not been properly and rigorous investigated, and many of the impacts described are not countered with evidence-based mitigation measures.

The current EIS refers to many significant impacts – from years of noise, dust and congestion to threats to local ecosystems – but the document is peppered with vague comments such as ‘TfNSW will implement mitigation measures **‘wherever feasible and reasonable’** or that TfNSW will undertake **‘additional studies’** or **‘further monitoring’**’.

Likewise, TfNSW’s online information sessions deflected the community’s genuine and informed concerns with similar promises of unidentified mitigation measures, again if ‘feasible and reasonable’. Questions submitted to TfNSW by email or the portal elicited inadequate responses, many merely referring affected communities back to the same incomplete information in the EIS that had sparked the query.

**This is a very large, very important project** that has the status of State Significant Infrastructure, enabling it to bypass many laws and regulations that would otherwise protect communities and the environment. This means every single impact must be rigorously and transparently studied and that **mitigating measures must be detailed, transparent and evidence-based** so that communities know exactly what will, or will not, be done to offset identified risks and losses.

**The current EIS does not commit TfNSW to essential mitigating actions and fails to provide the robust evidence-based analyses and recommendations that would be expected of any professionally-prepared EIS.**

Reading the document, it appears that much data is out of date as it uses a 2016 baseline and offers few, if any solutions that have been scientifically investigated for the specific circumstances described.

Perhaps, most glaringly, it fails to take into account significant changes in traffic patterns and working models since COVID-19 as well as more recent public transport infrastructure improvements, such as the B-Line bus service and the fast public transport service from Dee Why to the metro at Chatswood. It also fails to assess the project against the NSW Government’s

commitment to net zero by 2050 and other relevant climate change policies, despite an emissions-heavy construction and operational footprint and the absence of policies to drive the uptake of low emissions or electric vehicles.

As this is an individual submission, I am unable to deal with all issue raised in the EIS. They include, but are not limited to:

**Inadequate Air Quality data:**

The EIS process did not include installation of a Community Receptor at Balgowlah Boys High School, where some 1400 students will be directly impacted by intense construction traffic and activities over six years and will, during operation, be just a few hundred metres of a six-seven story high unfiltered emissions stack. Residents question have elicited vague responses claiming other receptors further afield adequately cover this high impact site.

Likewise, it is clear health outcomes for the wider community living, working and at school near either the Wakehurst Parkway or Burnt Bridge Deviation stacks are not based on either current, or local data sets. The 'facts' presented are nothing more than guesstimates.

For example, Vol 2F of the EIS (appendices I to K) page 35 states: "Three project specific monitoring stations for the WHTBL program of works were established for Transport NSW in 2017. One of these was at a background location and the other two were at locations near busy roads. Given the date of deployment, the time period covered was too short for these to be included in the development of background concentrations and model evaluation." Based on the accompanying maps, Figure 5-1 and 5-2 (pp36/7), these locations are near Wakehurst Parkway, Burnt Bridge Creek Deviation and possibly Cammeray. The data from these monitoring stations is vital to the question of air quality for this project.

It is scientifically impossible to draw air quality conclusions for the Seaforth/North Balgowlah/Balgowlah/Balgowlah Heights areas based on data sets from other, more congested areas of Greater Sydney.

In Volume 2F, Annexure H, base data for nitrogen dioxide levels in Tables H5 (Gore Hill Freeway) and H7 (Burnt Bridge Creek Deviation) are exactly the same.

It appears that the "data" is being used for projections and modelling with the Burnt Bridge Deviation stack (in a relatively unpolluted suburban area) is, in fact, the base data from the congested, polluted Gore Hill Freeway monitoring station. This is scientifically indefensible method of making projections and it follows that the EIS projections, modelling etc relating to air quality surrounding the Wakehurst Parkway and Burnt Bridge Deviation stacks are, likewise, not based on facts.

**Transparent air quality studies and modelling of construction and operational impacts must be undertaken to deliver reliable information that can withstand scientific scrutiny. These must be available to the public, not the politicians making decisions our behalf.**

### **Failure to identify and address significant environmental and community impacts on the Burnt Bridge Creek catchment.**

The proposed construction and operation of the tunnel will result in ground water drawdown beneath the Burnt Bridge Creek and a reduction in base and surface flows. Potential impacts would be experienced where maximum total flows would be reduced by 69 and 96 per cent respectively after 100 years of operation. **This would directly impact flora, fauna and downstream receiving waters, meaning the entire water system from Seaforth to Manly Lagoon and to the beaches of the Manly area will potentially be impacted.** The Burnt Bridge Creek catchment, including the Baringa Bush Community Garden, will also suffer substantial permanent ground water draw down. We understand this will be necessary prevent flooding of the tunnel. The ground water that would otherwise support the catchment and creek systems would be continuously pumped away as wastewater, leaving the Burnt Bridge Creek with significantly less water, or as the EIS models show virtually no water.

This EIS states: 'The freshwater creek runs for about four kilometres and **is a vital ecological corridor** of regenerated habitat that provides a range of important habitats for a diversity of local flora and fauna'. *EIS, Appendix O, pg 45*. This includes a camp of endangered grey-headed flying foxes that rely on the creek and the retention dam in Balgowlah Golf Course for water. Northern Beaches Council says of the Burnt Bridge Creek Reserve: 'The reserve is significant in terms of both **ecological and community values**. Ecologically the riparian corridor **provides a habitat link between the coast and natural areas further inland. The protection and enhancement of the native riparian vegetation in the reserve is crucial for the movement of wildlife.**'

Yet, the EIS pays little attention to such a significant impact on this creek systems, despite international and Australian research that highlights risks to ecosystems when tunnel construction affects ground and surface water. '*Any changes in the ground water environment of any disturbances to the water balance of catchments may cause environmental impacts detrimental to the surrounding vegetation*' (Gokdemir et al, *Advances in Water Resources*, 133, 2019). Modelling is, however, challenging and to assess the impact of tunnelling vegetative, atmospheric and hydraulic parameters must be combined. **The EIS provides no scientifically robust study the impacts across the catchment, within the creek and its riparian zone and downstream to Manly Lagoon and the Manly beaches.**

**The EIS says:** 'While these reductions could be considered significant, in particular for Burnt Bridge Creek and Quarry Creek, they are unlikely to result in a complete loss of aquatic habitat. Pools would be retained and there would still be high flows within the waterways immediately after rainfall events.'

Such a conclusion has no scientific basis. **The removal of 96% of the water from a creek that supports aquatic life and a diverse riparian zone, including many species that rely on access to its waters, will have devastating impacts for ecosystems from Seaforth to Manly.** By contrast Northern Beaches Council's experts, in their (first) draft submission noted: '**The EIS**

**trivialises what would be significant hydrological and ecological impacts on Burnt Bridge Creek. The creek would essentially function as a storm water channel...** Other impacts include the effects of ground water drawdown on riparian vegetation and other terrestrial flora and fauna (protected flying foxes etc) reliant to some degree on available freshwater or aquatic communities.'

Northern Beaches Council in its EIS submission emphasises the need for a study not just of the entire creek, but Manly Lagoon and potential impacts on Manly's beaches due to the loss of base water flows in the creek system and catchment. Such studies must be undertaken.

While the EIS does suggest further studies, these are not defined or detailed. It is very worrying that the EIS states: 'Where unacceptable ecological impacts are predicted, **feasible and reasonable mitigation measures** to address the impacts should be identified, incorporated into the detailed design, and implemented during construction'. This **does not constitute a commitment to do anything**, as 'feasible and reasonable' are subjective terms and required design changes to protect this water systems may be judged as not feasible.

**It appears the EIS has been rushed and that none of the necessary detailed studies have been done to even understand the environmental impacts of the ground water draw down, nor the subsequent work needed to design means of preventing serious ecological damage across an entire catchment and watercourse. Further transparent and comprehensive studies are needed.**

The vulnerable flora and fauna – who rely on Burnt Bridge Creek - are greatly valued by the local community as is the cool, riparian zone and its walking and biking path. Of particular concern is:

**Grey-headed flying fox roost:** Balgowlah's flying foxes are a nationally and state protected endangered species relying on Burnt Bridge Creek and the water retention dam at Balgowlah Golf Course. Their camp lies in the vegetated area between Balgowlah Road and Burnt Bridge Creek Deviation, about 120 metres from the construction footprint. Potential noise impacts are noted in the EIS. The solution is listed as '**Where feasible and reasonable**, noise BL intensive works with the potential of impacting the Grey-headed Flying-fox camp (ie demolition involving rock hammering or resurfacing works) should be programmed to avoid September to February'. (19.6) The key issue here is the wording. '**Where feasible and reasonable**' is not a requirement to protect this endangered species, it is an invitation to make a subjective judgement that may be swayed by financial priorities.

The NSW Government, through Save our Species, lists the key threats to Grey-headed flying foxes as **loss, fragmentation and degradation of habitat**, and widespread pervasive factors such as impacts of climate change and disease.

**The Beaches Link project, as currently described in the EIS, will hasten the loss of this endangered grey-headed flying fox colony and many other flora and fauna species through**

loss of habitat, the de-watering of the creek and the removal of the water retention dam at Balgowlah Golf Course. A detailed expert study of the impact on this colony is critical.

**My additional concerns about the project include:**

- No dedicated public transport lane in the tunnel and no clear plans for future clean public transport, such as trackless trams
- Inadequate analysis of increased traffic on local roads, in particular approaching the link road in Balgowlah and associated impacts on residents and local schools
- Serious and irreparable impacts on flora and fauna in Manly Dam and Garigal National Park and across the project, including 23 vulnerable species
- Disturbance of contaminated sludge in Middle Harbour, extreme noise impacts for residents during construction of coffer dams, additional congestion caused by the raising of Spit Bridge for spoil barges
- Use of biodiversity offsets which will result in the death of numerous species of flora and fauna locally that will never return
- A project model which puts contractors in charge of compliance/conditions – not TfNSW - providing no reassurance that even agreed development conditions will be met
- No details of truck routes to residents, schools and workers impacted can understand the movements of large numbers construction vehicles
- Expected contractor parking and crowding on residential streets
- Risks to health and amenity for tens of thousands of school students during construction (dust, noise, extreme congestion and stress) and operation due to proximity of unfiltered stacks
- A project that will lock the NB LGA into a private car, toll based transport model which is the most punitive transport model financially and the most damaging to the environment.
- A project that fails to take into the NSW Government's commitment to 'net zero by 2050' as it is both emissions-intensive during construction and operation including the loss of thousands of mature carbon dioxide absorbing and fauna supporting trees.
- A project that fails to understand the community's deep love for the natural environment on the northern beaches and our responsibility to 'future proof' this region for our children by retaining and protecting our valuable urban bushland.

**Summary: To improve transport for those who need to move in and out of the northern beaches, I would support public transport and active transport options over private toll roads, such as a metro that would need a much smaller and less destructive tunnel. I hope the Beaches Link tunnel's many negative impacts are seriously considered by Transport for NSW before public money is committed to such an uncertain transport model.**

