Submission No 364

INQUIRY INTO IMPACT OF THE WESTERN HARBOUR TUNNEL AND BEACHES LINK

Organisation: Baringa Bush Resident Group

Date Received: 17 June 2021

Inquiry into impact of the Western Harbour Tunnel and Beaches Link

June 15, 2021

Submission on behalf of the Baringa Bush Residents' Group, Seaforth

To: The Hon Daniel Mookhey MLC, The Hon Mark Banasiak MLC, Ms Abigail Boyd MLC, The Hon Sam Farraway, MLC, The Hon Trevor Khan MLC, The Hon Shayne Mallard MLC, The Hon Tara Moriarty MLC

Dear Committee,

Please find the submission of the Baringa Bush Resident Group below. As residents of the northern beaches our submission covers the impact of the planned Beaches Link tunnel, not the Western Harbour Tunnel.

The document below is based on our submission to the EIS earlier this year but has been updated, in parts, with further relevant information.

Please note that we are unable to respond to **Terms of Reference (a) the adequacy of the business case for the project, including the cost benefits ratio**. To the best of our knowledge, no such business case has been made publicly available. In a democracy, the allocation of large sums of borrowed money to major infrastructure projects should require governments to openly demonstrate that taxpayers are getting value for that money. The absence of a business case represents a serious shortcoming in 'the appropriate levels of transparency and accountability that would be expected of a project delivering by a public sector body', ToR (i).

Based on our groups' close reading of the EIS and further research, our detailed responses to other Terms of Reference follow overleaf.

We would like to thank the Committee for the opportunity to make this submission,

Louise Williams

Public Officer

Baringa Bush Residents Group.

Submission on behalf of the Baringa Bush Residents' Group, Seaforth

The **Baringa Bush Residents' Group** is a registered residents' group in the Seaforth/North Balgowlah area. Its members have collaborated to review and understand the Environmental Impact Statement (EIS) for the Beaches Link Tunnel.

BBRG Charter: Protect and improve the standard of living, amenities and environment in our local area and the greater Northern Beaches LGA through collaborative engagement with residents and other Resident/Community Groups to ensure the views of members of our Residents Group are taken into account in the decisions made by the Northern Beaches Council and the State Government.

Executive Summary

Members of the Baringa Bush Residents' Group have reviewed the EIS, liaised with Northern Beaches Council, submitted multiple questions to Transport for NSW, attended TfNSW information sessions and have sought the input of independent scientific, planning and transport experts. We believe **the environmental, health, community and economic costs of the project are unacceptably high** and the benefits questionable**.** The constant use in the EIS of terms such as 'negligible' as well as various promises of **'feasible and reasonable mitigation measures'** to address impacts have no basis in science. Such subjective terms provide neither the accurate nor robust information residents are entitled to, nor any reassurance that impacts have been properly identified and understood – and greatly underestimates the scientific literacy of affected communities.

The BBCG considers the EIS that sets out the proposed Beaches Link tunnel project

- **Highlights devastating and permanent losses of otherwise protected and irreplaceable tracts of bushland and ground water resources with dire consequences for communities and local ecosystems, including numerous endangered flora and fauna species.**
- **Fails to make the case for the Beaches Link as a 'congestion busting' solution for the Northern Beaches LGA**
- **Ignores majority support for public transport solutions and the contribution of local traffic to congestion (which the tunnel would not address)**
- **Ignores recent shifts in working patterns to include hybrid commuting/work from home model (WFH), decentralisation and a shift of emphasis for city planning away from cars and towards the preservation of green space (Stokes, Feb 26)**
- **Reveals serious risks to the health, safety and amenity of local residents during both construction and operation**
- **Fails to provide accurate air quality data**

As a community group we have finite resources. Consequently, we have selected several issues to highlight. We have also agreed to endorse submissions on EIS topics not covered here but prepared and submitted by the Balgowlah Residents Group, Viable Transport Solutions, the Baringa Bush Community Garden, the Save Manly Dam Catchment Committee and the Australian Conservation Foundation (Northern Beaches).

1. **Terms of Reference (f) the consultation methods and effectiveness, both with affected communities and stakeholders**

Inadequate consultation: We joined with many other organisations in seeking an extension of the EIS submission period due to the COIVD-19 lockdown, the lack of face to face consultation, the lengthy delays in receiving answer to questions and the voluminous nature of the EIS documents. We reiterate our view that affected communities were given inadequate time and inadequate opportunities to elicit answers from TfNSW. In many cases making a genuine inquiry became a farcical process of waiting long period to simply be referred back to same page or section of the EIS that the original question pertained to**.**

2. **Terms of Reference (j) the impact on the environment, including marine ecosystems.**

Substantial and permanent environmental impacts and losses: **The EIS details substantial damage to sensitive ecosystems and otherwise protected reserves during construction, as well as permanent losses that will be felt long into the future**. These include but are not limited to the felling of almost 2,000 trees from the Manly Dam catchment with known risks to biodiversity (including endangered species), the de-watering of the Burnt Bridge Creek catchment leading to drying up of a critical water system running from Seaforth to the ocean at Queenscliff, the removal of hundreds more trees along the creek and the risk to Middle Harbour posed by the dredging of contaminated sediment and unavoidable sediments plumes across the Harbour. Some 23 endangered species will be impacted across the project.

Where biodiversity offsets are proposed, we have no confidence these will limit net losses to our precious environment. We are also painfully aware that offsets have no effect locally, so cannot make up, for example, for the felling of one of the last patches of endangered Duffy Forest, now one of the rarest forest ecosystems on the planet. Likewise, the removal of habitat supporting our local endangered fauna species means they will simply die in situ, they will not be moved elsewhere. A TfNSW briefing session confirmed offsets for trees lost could not be achieved in the vicinity of Manly Dam and Burnt Bridge Creek. We have already witnessed the ineffectiveness of replanting around the Northern Beaches Hospital and other development sites where numerous trees have died. A recent investigation revealed the NSW government has failed to deliver conservation offsets for large areas of bush cleared in Sydney's west for housing and toll road developments over two decades, including the M7 offset at Colebee Reserve that remains an 'ecological wasteland'. https://www.theguardian.com/environment/2021/feb/10/its-an-ecological-wasteland-offsets-for-sydney-tollway-were-promised-but-never-delivered

2.1 Burnt Bridge Creek and catchment -risks of collapse of ecosystems

Burnt Bridge Creek runs from Seaforth to Manly Lagoon, and occasionally, out to sea at Queenscliff and its riparian corridor includes a walking and biking track that is heavily used and much loved. The EIS states: 'The freshwater creek runs for about four kilometres and **is a vital ecological corrido**r 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**.'

The riparian zone was regenerated with the support of an environment levy imposed by the then Manly Council. As such local residents have a great interest in the creek and its surrounds. Our own group has undertaken bird surveys. We also have access to a recent flora and fauna assessment commissioned by Northern Beaches Council in September, 2020 for the upper bush adjoining the upper reaches of the creek, Baringa Bush Reserve, in Seaforth. That survey was well aligned with our own species survey and **found a high level of biodiversity including the presence of:**

Brown-striped Frog,
Common Eastern Froglet,
Eastern Dwarf Tree Frog,
Australian Brush turkey,
Australian King Parrot,
Australian Magpie,
Buff-banded Rail,
Crimson Rosella,
Eastern Whip-bird
Grey Butcherbird
Laughing Kookaburra,
Little Corella
Little Wattlebird
Magpie-lark
Masked Lapwing
Noisy Miner
Olive-backed Oriole
Pied Currawong
Rainbow Lorikeet
Red Wattlebird
Spotted Pardalote
Spotted Turtle-Dove
Superb Fairy-wren
Tawny Frogmouth
Welcome Swallow
White-browed Scrubwren
White-faced Heron
Willie Wagtail
Yellow Thornbill
Yellow-tailed Black-Cockatoo
Common Ringtail Possum
Common Brushtail Possum
Grey-headed Flying fox
Long-nosed Bandicoot
Copper-tailed Skink
Dark-flecked Garden
Eastern Blue-tongued Lizard, Eastern Water Dragon,
Eastern Water-skink
Pale-flecked Garden Sunskink
Weasel Skink
Yellow-bellied Three-toed Skink

The survey by GIS Environmental Consultants also identified suitable habitat for foraging by **threatened** microbats and noted a known Powerful Owl roost nearby in Burnt Bridge Creek. It emphasised 'The fauna species list is not comprehensive and there are likely to be additional seasonal, transient and nocturnal species not recorded.'

Grey-headed flying fox roost: Balgowlah's flying foxes are a nationally and state protected endangered species that rely on access to water in Burnt Bridge Creek and the water retention dam at Balgowlah Golf Course. Grey-headed flying foxes were included on a Federal Government's list of 100 species requiring critical attention following the 2019/2020 bushfires, given the devastating loss of flora and fauna. **Research also shows some 30% of Australia's EPBC-listed threatened species live in urban areas and scientist recommends** '*National conservation policy should recognize that cities play an integral role when planning for and managing threatened species.' (Global Ecology and Biogeography, (2016) 25, 117–126).*

The Balgowlah flying fox camp is particularly important for two reasons. 1. Its coastal location means sea breezes usually keep maximum temperatures below 37-38 degrees C, the point at which flying foxes drop young, or themselves fall out of their roosts, with large die offs reported. 2. The colony's proximity to large tracts of urban bushland where they play a critical role as a keystone species responsible for night pollination and the maintenance of healthy genetic diversity.

For residents, our local flying foxes are a wonderful sight as they depart to forage along the upper reaches of the creek every evening. 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 the **loss, fragmentation and degradation of habitat**, and widespread pervasive factors such as impacts of climate change and disease.

The Beaches Link project will hasten the loss of this endangered protected and ecologically vital grey-headed flying fox colony through extreme, cumulative, long term construction disturbances, loss of access to water due to the de-watering of the creek and the removal of the water retention dam at Balgowlah Golf Course and loss of habitat. (Video attached of flying foxes used the dam.)

The EIS provides no credible evidence-based plan to suggest the endangered Grey-headed flying fox camp will be protected. (video file available of ff's drinking, unable to be uploaded to EIS submission site).

2.2 Burnt Bridge Creek Riparian Vegetation**:** Based on studies conducted by appropriately qualified members of the BBRG, the dominant vegetation type in the Burnt Bridge Creek catchment is (per Specht) Angophora costata woodland.

The riparian zone vegetation includes mature Angophora costata and Eucalyptus piperita, numerous Casurina glauca of various heights and maturity, cheese trees (Glochidion ferdinandi) as various heights and maturity and a scattering of Eucalyptus resinifera (Red Mahogany) and other large trees such a Morton Bay fig trees. The mid layer includes tree ferns (right at the water's edge), Cabbage Tree palms and various medium sized trees such as blueberry ash (Elaeocarpus reticulatus) and mature Calicoma serratafolia (Black wattle) as well as many Omalanthus populifolius (bleeding hearts), some sandpaper figs and some Pittostrum undulatum. The shrub layer includes Grevillia parviflora, Westringia, Dillwynia. The ground layer includes large areas of Bracken, plus species such as Lomandra longifolia, Dianella caerulea, basket grass, native violets (Viola hedaracea) as well as some invasive weeds such as trad, fishbone fern and asparagus fern.

2.3 Threat to Burnt Bridge Creek ecosystems – from Seaforth to Manly

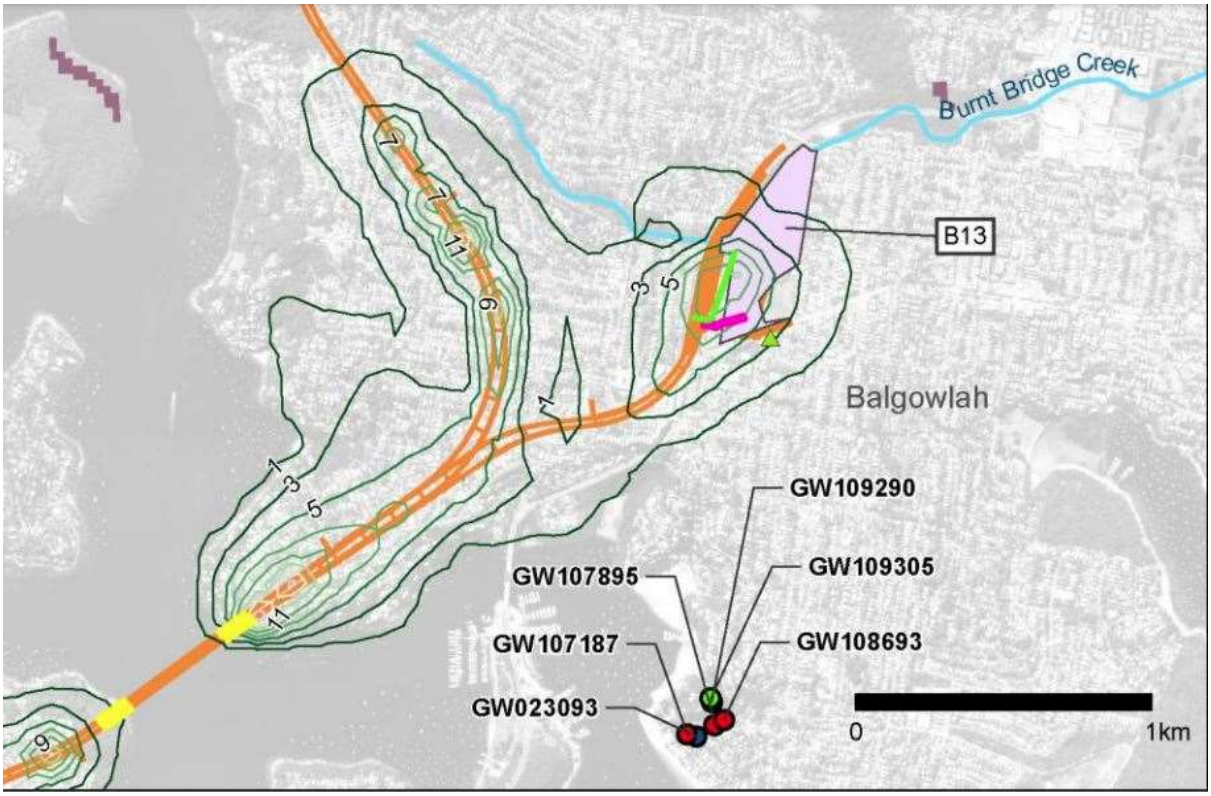
The rich biodiversity supported by Burnt Bridge Creek depends on the ground and surface water within the catchment that flows into and along the creek.

The EIS reveals the permanent removal of up to 96% of base flow from the creek and substantial groundwater drawdowns across the entire catchment.

It also says: Groundwater baseflow impacts due to drawdown at potentially connected surface water systems Flat Rock Creek, Quarry Creek, and Burnt Bridge Creek are predicted to occur due to the project. **This could impact ecosystems reliant on the water within these creeks.** App N, pg 12.

Table 9-10: Summary of predicted baseflow reduction percentages for watercourses

Watercourse	Baseflow reduction (%)	
	End of Construction (June 2027)	Approx. 100 years post-operation (December 2126)
Flat Rock Creek	20	39
Quarry Creek	23	69
Burnt Bridge Creek	79	96
Willoughby Creek	n/a	n/a
Sailors Bay Creek	n/a	n/a
Berrys Creek	n/a	n/a
Manly Dam	2	2
Camp Creek and Sugarloaf Creek	0	4



2.4 The EIS trivialises the environmental impacts of base flow reductions

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 an analysis and conclusion has no scientific foundation. **It is blatantly obvious that the removal of 96% of the water from a creek that supports such biodiversity, including many species that rely on access to its waters, will have devastating impacts for ecosystems from Seaforth to Manly**. It also fails to consider or investigate the implications of reduced water flow for the Manly Lagoon including reduced oxygenation and the impact on its aquatic life. The pools the EIS mentions – again with no scientific backing – would essentially be stagnant and, therefore, unable to support many forms of life. They would also put residents at risk of mosquito borne diseases in an area known for Ross River Fever.

By contrast Northern Beaches Council's experts, in their draft submission note: '**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.' The EIS **fails to assess** impacts downstream on Manly Lagoon including on endangered ecological communities. See attachment.

Northern Beaches Council makes a number of details recommendations in the EIS submission. BBRG supports all of these requirements.

The EIS, itself, suggests further studies but these are not defined or detailed. It is also of great concern 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. **Again, this does not constitute a commitment to do anything, as 'feasible and reasonable' are subjective terms and design changes to protect this water systems may be judged as 'not feasible'.**

Based on the current project design – extensive and ongoing drawdowns of ground water in the Burnt Bridge Creek catchment threatens the endangered grey-headed flying fox colony at Balgowlah that relies on access to water and imperils all other terrestrial and aquatic ecosystems connected to the creek. It also raises questions for residents of the catchment as no study has been done to examine the affected on vegetation, including large trees, of the removal of ground water over such a larger area.

The Beaches Link tunnel project cannot proceed without detailed studies of the impacts of groundwater drawdown on ecosystems from Seaforth to Manly, and the relevant catchments and without evidence-based mitigating measures determined by the desired environmental outcomes, not by financial or other concerns.

3. **Terms of Reference (e) the extent to which the project is meeting the original goals of the project and (g) the extent to which changes in population growth, work and travel patterns due to the COVID-19 pandemic have impacted the original cost benefit ratio.**

Failure to make the case for the Beaches Link Tunnel: Transport for NSW has published fanciful projections of time savings for northern beaches residents with the completion of the Beaches Link Tunnel. The EIS spruiks the status of Military Road is the 7th busiest road corridor in NSW and that Spit Road is the 10th busiest road corridor. It goes on to claim as a major benefit the in the EIS for the Beaches Link Tunnel is that traffic along the Spit Road and Military Road corridors will be reduced once the Beaches Link Tunnel is built and is operating. This is based on a projection for 2037 of 10% less traffic travelling along Military Road, and there will be 33% less traffic travelling on Spit Road – from Spit Bridge to Spit Junction in Mosman.

This forecast was developed based on data going back to 2016 and does not factor in many more recent developments. First, increased bus transport capacity (e.g, the Dee Why to Chatswood Express Bus Service), the popularity of the B-line service and, since COVID-19, the growing adoption of WFH or hybrid work models. Although the EIS argues that traffic is 'back to normal' across Greater Sydney and speculates that traffic flow will continue to grow, there is no evidence presented for this assumption. Conversely, the EIS fails to take into account ongoing 'social distancing' on buses which are currently running at below capacity. Community members tell us they are currently driving only until the post vaccinations/post-COVID period and will return to public transport. It also fails to consider that a much greater per centage of traffic on the Spit Bridge is local, as parents work from home but temporarily drive children to school due to limited bus capacity. Likewise, the EIS does not take into account sudden reductions in bus services across the Seaforth/Balgowlah area before Christmas, which has greatly limited public transport options for many workers and school children, forcing some people back into cars.

Much research points to the popularity of WFH. For example, the ADAPT survey of 220 of Australia's largest corporate and government organisations (Sept, 2020) found they expect 43% of employees to be away for the office on any given day and while commuter numbers will bounce back, 'they will be nowhere near the level before March, 2020'. When considered with the fact that over half of all residents (53%) of the Northern Beaches LGA work within the local area, there are many potential confounders to the models and projections presented in the EIS. The interview with Planning Minister, Rob Stokes, published on February 26 (SMH) is also at odds with the private car-based toll road community model of the Beaches Link tunnel. He confirmed pandemics have always had an impact on planning and architecture, and Sydney would be reshaped by COVID-era changes. Mr Stokes said the draft Design and Place SEPP, which will apply to state significant developments, would encourage cycling over cars, ensure more people have access to green space, prioritise sustainability and take into account working from home. This coincided with Infrastructure Australia reporting a 200% increase in people moving out of cities and adopting remote working models (ABC). Likewise, the Northern Beaches Council Transport Strategy aims to have achieved a 30 per cent reduction in trips by car by 2038 by prioritising active transport and public transport.

The EIS also reveals that local congestion will worsen, not only during construction (this issue will be widely discussed in other submissions) but once the tunnel is operational, due to congestion on roads around tunnel entries and the creation of multiple new rat runs. For Frenchs Forest (7.7.1), for example, a reduction in travel speeds of 13% is forecast in 2037, indicating that the same communities forced to suffer through so many years of construction at either end of the Wakehurst Parkway – and the endure to loss of so much of their natural environment – will actually end up worse off. On the subject of travelling time 'savings', the CSIRO has reported that pollution is regulated in the M5 East Tunnel by lowering traffic speed when pollution/car volumes are high. Common practice in NSW tunnels appears the lower of travel speeds during periods of high demand (ie peak hours), are used to regulate pollution. This further erodes any travelling time 'savings' touted in the EIS. (http://www.cmar.csiro.au/e-

print/internal/2007/maninspc_xa.pdf?fbclid=IwAR1uc_wcPC310lRHHgQDuBekf1ZVJrYCW5Rb16thPOApOKFcu8KorgPBo4w

4. Terms of Reference (b) the adequacy of the consideration of alternative options

4.1 Outdated analysis of alternatives: The EIS (4.3.2) dismisses alternative to the tunnel projects. It claims that 'travel demand management measures' – such as flexible working arrangements, public transport etc – would 'require considerable changes in social attitudes, travel behaviour and government policy'.. 'and 'can take many years to achieve'. Evidently, this section was developed well before COVID-19. As is now widely acknowledged as outlined on pg 7. That Australians have demonstrated that such changes can be implemented effectively and rapidly. The EIS also ignores recent surveys revealing the preferences of residents. For example, Warringah MP Zali Steggall's Transport Survey (2019) found only 38 per cent of residents Manly, Fairlight, Balgowlah, North Balgowlah, Seaforth, Allambie Heights and Frenchs Forest supported a car tunnel but that the majority of residents wanted better public transport, including along the Dee Why to Chatswood corridor that avoids the Spit pinch point. It appears the tunnel model was also developed well before the major upgrades to Mona Vale Rd and Warringah Road, the introduction of the well-used and popular B1 express bus route and plan for similar mass transit options along the East-West corridor linking the northern beaches to Chatswood.

The recent NSW Productivity Commission Report, *Rebooting the Economy*, highlighted the importance of behaviour change as a first option ahead of extremely costly, disruptive and environmentally damaging major infrastructure projects. There has been no such effort on the Northern Beaches despite the popularity of public transport. On the contrary, bus services were amalgamated and reduced in December, 2020, leading to local protests and great anxiety among communities, including parents facing the loss of school specials. As such, there seems to be no compelling evidence to suggest that alternative options would not reduce congestion.

RECOMMENDATION 8.4: ADDRESS CONGESTION BY IMPROVING USE OF EXISTING INFRASTRUCTURE As a first response, investigate a package of light-touch options to reduce congestion. This should include measures that promote good driving behaviour, encourage off-peak travel and make targeted investments at specific congestion pinch points. No later than three years following implementation comprehensively assess reductions in congestion and broader impacts on transport networks. Contingent on evaluation of the package of light-touch interventions conduct a Gate 1 strategic assessment for cordon charging in the Sydney CBD and other congestion hotspots. pg 25, Recommendations

https://www.productivity.nsw.gov.au/sites/default/files/2021-06/Productivity%20Commission%20White%20Paper%202021%20-%20Detailed%20Recommendations.pdf

In addition, in May, 2021, NSW Planning Minister Rob Stokes warned of Sydney becoming 'enslaved' to private cars, exactly the transport model the Beaches Link tunnel will impose on future generations. Mr Stokes was quoted in the SMH saying: *the government needed to influence people's decision-making when it came to transport, and provide better walking, cycling and public transport options across the city*. The BBRG agrees wholeheartedly.

4.2 The bigger picture: In 1983 the original Warringah Corridor transport inquiry (Kirby) ultimately rejected the proposal to build a freeway connected to the Warringah Expressway. The inquiry found in favour of developing public transport/mass transit for two key reasons. **1. That additional road capacity would be accompanied by development that would increase the population of the northern beaches and, 2. in the absence of an effective mass transit system that population increase would put more cars on the road, and the new freeway would soon become congested, eroding any promised saving in travel times.** Such scenarios have been documented over and over again in cities all over the world. The EIS acknowledges that increased housing development would accompany the building of the Beaches Link tunnel, thereby increasing traffic. As no dedicated public transport lane or service is factored into the design it is reasonable to conclude that any early benefits would be quickly eroded as more cars came onto the road.

The EIS also fails to address the reality that the tunnel is two-way. Given the serious limitations on parking and congestions along the northern beaches' coastline, particularly during summer weekends, what provisions have been made for a mass influx of cars? Likewise, what provision has been made for accommodating many more private cars in the CBD and managing congestion as they exit the tunnel. The EIS provides no reassurance that the interface of the tunnel with surrounding road systems and local communities had been considered.

New traffic modelling post COVID must be undertaken to establish a clear and current picture of demand for a toll road – without a backdrop of a reduction in much valued public transport caused by timetable changes.

A new current study should be undertaken to determine residents' preferred transport solution, to understand long term working from home trends and to evaluate alternative to a six lane tunnel.

A comprehensive study of impacts on target destinations (CBD/beaches) on parking, local congestion and local amenity must be undertaken, including the capacity of the northern beaches to accommodate large numbers of extra private vehicles on weekend.

A dedicated bus lane must be factor into the tunnel, as per community's demands and earlier discussions with TfNSW

5. Terms of Reference (m) any other related matter

5.1 Air quality and health during construction and operation:

As a residents' group we field questions and listen to concerns from people living within the expected footprint of the unfiltered stacks to be installed at both the Balgowlah and the Wakehurst Parkway entry/exit points. In fact, the area we represent fits almost perfectly into the footprint for the most concentrated emissions, based

on the Chief Scientist's model. That is, our local schools, homes, shops and businesses are within the 200-1200m radius. Having read the chapters and Annexures on air quality, and having posed questions to TfNSW, we are extremely concerned about the quality, or otherwise, of the air quality information published in the EIS and the likely long term impacts of the unfiltered emissions stacks. It is difficult not recall the Premier Gladys Berejiklian chastising Labor when in Opposition in 2008, saying 'World's best practice is to filter tunnels. Why won't they (Labor) allow people sleep at night, knowing their children aren't inhaling toxins that could jeopardise their health now or in the future?'

Our experience in trying to answer residents' questions about the Beaches Link has left us with little confidence that the health of our communities and children will be taken seriously. It is clear EIS data relating to health outcomes for those 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.

Volume 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."

From 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 is clear in this case the "data" being used for projections and modelling with the Burnt Bridge Deviation stack (in a relatively unpolluted suburban area) is actually the base data from the congested, polluted Gore Hill Freeway monitoring station. This is not an accepted scientific method of making projections.

There is no scientific basis for any projections, modelling etc relating to air quality surrounding the Wakehurst Parkway and Burnt Bridge Deviation stacks as they are not based on facts. The Air Quality sections relating to the Wakehurst Parkway and Burnt Bridge Deviation are a cynical exercise to deceive and confuse both the public, and the politicians who are looking to this document for accurate information.

5.2 Why electric cars won't protect communities from air pollution: **Recent 'spin' about electric cars filling the tunnel** are just that. Australia's uptake of electric cars is miniscule and governments at every level have rebuffed calls for policy incentives or levers to drive their adoption. Instead, Australia's highest selling vehicle, dual cab utes, are incentivised due to a FBT exemption, thereby driving up diesel and petrol emissions. **In the first quarter of 2021, diesel passenger car, SUV and**

LCV sector jumped 20.7 per cent over the same period in 2020. The World Health Organisation classified diesel exhaust as carcinogenic in 2012. Similarly, increased congestion and vehicle movements during tunnel construction will expose local students, residents and workers to elevated levels of vehicle exhaust (primarily diesel) over many years.

The electric vehicle 'furphy' is further exposed when particulate pollution is investigated. Studies in the UK, where both new diesel and petrol vehicle sales will be banned by 2030, show harmful particulate pollution from tyre and brake wear can be '1,000 times worse than vehicle exhaust', especially from larger SUVs and light commercial vehicles, such as those dominating Australia's vehicle markets. This well documented risk was recently acknowledged by Planning Minister Stokes. On May 21, 2021 he was reported as saying:
"Mr Stokes said electric vehicles were heavy and "torque-y" and created a lot of wear and tear on roads. He also said the weight contributed to the amount of particulate matter they expelled.

"Because EVs are so heavy, those particulates from brakes and tyres can actually be more significant than from existing petrol- and diesel-powered vehicles," he said."

This was later contradicted by the NSW Transport Minister Andrew Constance who says (SMH, June 21) '*Transport Minister Andrew Constance says he's determined to see the electrification of all cars, buses and trucks in NSW in order to improve air quality amid public health concerns over the government's expanding motorway network.'* It is, however, unclear where Mr Constance's optimism comes from.

In addition, a long term study of a mass die off of salmon in urban streams in Washington State found that storm water contaminated by microparticles from tyre wear contained toxic chemicals responsible for the fish deaths (https://www.emissionsanalytics.com/news/pollution-tyre-wear-worse-exhaust-emissions). Given the proximity of the Beaches Link tunnel's stacks to the sensitive Manly Dam catchment and Burnt Bridge Creek – and the lack of containment for runoff from the proposed widened Wakehurst Parkway – we can expect increases in such toxic pollution in local waterways, potentially negatively impacting local ecosystems including multiple endangered species. (https://www.sciencedaily.com/releases/2020/12/201203144228.htm)

Transparent air quality studies and modelling of the sites of the stacks must be undertaken to deliver reliable information that can withstand scientific scrutiny – and that include the impact of particulates generated by tyre and brake wear. These must be available to the public, not just the bureaucrats and politicians who are making this decision on our behalf.

6. **Terms of reference (k) the adequacy of processes for accessing and responding to noise, vibration and other impacts on residents, during construction and operationally.**

Construction impacts on local residents and the environment: The construction process will establish massive, noisy, dirty worksites at the two key access points to the northern beaches (Balgowlah, Seaforth) and at Spit West and within Middle Harbour - in close proximity to schools, homes, workplaces and ecologically sensitive areas. For some local students exposure to noise, dust, heavy transport emissions and congestion will persist throughout their entire high school experience. Proximity to construction is stressful at any time. The six year period proposed here is intolerable. That

both sites tunnel entry sites will be concurrently operated will effectively trap some residents in between them, due to massive increases in heavy and light construction vehicle traffic. The additional congestion at these sites will have a massive domino effect. Travel times out of Manly/Fairlight will be affected, as will travel times from many other parts of the peninsula. Other individuals and groups, including parents and school P&Cs, will address this issue in greater detail.
One key issue for our members however is this:

In a response from Senior Communications and Stakeholder Engagement Officer for Transport NSW, , it was confirmed the **only road access for residents living south of Northern Beaches Hospital to the only hospital in their area,** will be closed periodically during construction of the Wakehurst Parkway stack.

"The EIS does point to potential occasional and brief closures of Wakehurst Parkway should blasting be required. If this is the case, it would require the short-term closure (up to 10 minutes) of sections of Wakehurst Parkway to general traffic. Any road closures would be carried out under traffic control and outside peak periods to ensure safety and minimise disruption to the road network. This is described in Section 6.9.2 of Chapter 6: Construction work of the EIS.

Any other activities elsewhere requiring temporary partial road closures would likewise be carried out outside of peak periods and/or during night time to minimise the impact of these activities on the road network where feasible and reasonable. Ten minutes might not seem much to Ms , but it **is life-threatening for heart attack victims caught up in a road closure**.

Further consideration must be given to construction induced congestions, especially to the risks of reducing emergency access to the Northern Beaches Hospital from Seaforth/Balgowlah.

Consideration must be given to delaying or staggering construction. Given the huge volume of construction occurring across Sydney, work on the Beaches Link tunnel should be delayed until after the completion of the Western Harbour Tunnel (to avoid massive city wide gridlocks) and consideration should be given to constructing one tunnel entry at a time, to alleviate congestion.

In summary: BBRG believes the EIS highlights many serious and unacceptable risks and losses but provides few solutions, giving residents little confidence that the Beaches Link tunnel can be built safely or sustainably and just as little confidence in the projected savings in travel times.

Images along Burnt Bridge Creek on page 15-16 follow

Northern Beaches Council draft response to the EIS below:

EIS trivializes what would be significant hydrological and ecological impacts to Burnt Bridge Ck. Up to 96% reduction in baseflow would result in permanent loss of (bedrock) run habitat and associated biotic communities would also disappear. The creek would essentially function as a stormwater channel only discharging after larger rainfall events. The waterway would become a series of disconnected pools with poor water quality and an impoverished macroinvertebrate community comprised entirely of taxa tolerant to low flows, pollution and flying adult stage able to recolonize ephemeral pool habitat. During dry periods it is likely these pools would dry entirely and therefore would not function as refugia. Other possible impacts include effects of groundwater drawdown/reduced baseflow on riparian vegetation and other terrestrial flora and fauna reliant to some degree on available freshwater or aquatic communities (e.g. possibly microbats, insectivorous birds etc).

Inadequate assessment of two Key Threatening Processes listed under NSW Fisheries Management Act 1994.

- *Degradation of native riparian vegetation along NSW water courses*. Assessment only considers direct removal of riparian vegetation and not potential impacts due to hydrological changes (groundwater drawdown and near complete loss of baseflow).

38

585

orthern
eaches
ouncil

ATT
Response to Beaches Link Environment Impa
ITEM NO. 13.2 - 23 FEBI

Submission on Environmental Impact Statement – Beaches Link and Gore Hill Freeway Construction

- *Installation and operation of instream structures and* ***other mechanisms*** *that alter natural flow regimes of rivers and streams.* Assessment only addressed effects of culvert extension works and/or scour protection at Burnt Bridge Creek and has not considered impacts of groundwater drawdown which will significantly affect natural flow regime in reducing baseflow by 96%.

EIS does not assess impacts of reduced baseline flows in Burnt Bridge Creek on hydrology and ecology of downstream Manly Lagoon estuary and its associated/fringing terrestrial vegetation communities (which include EECs).