

I object to the Beaches Link Tunnel on the basis that it will wreak irreversible environmental damage and negatively impact the physical and mental health of people in Balgowlah and Seaforth as it reduces their quality of life, whilst not actually providing an effective solution to the transportation needs of the Northern Beaches into the future.

### **High risk to human health at Sandy Bay and Clontarf**

I object to the Beaches Link Tunnel because the construction of the tunnel between Northbridge and Seaforth will lead to toxic contamination of the water at Clontarf and Sandy Bay.

The dredging that will take place in Middle Harbour between Seaforth and Northbridge to build the cofferdams will disturb potentially high levels of dangerous toxins from the silt and sediment at the bottom of the harbour.

As the EIS states, 'The sediments pose a high contamination risk to construction given that contamination is known to be present within sediments which are likely to be excavated and exposed during the construction of the cofferdams in Middle Harbour.' (EIS, Appendix M, p94).

This contamination is thought to include such toxins as heavy metals, hydrocarbons, pesticides, organotins, per- and polyfluoroalkyl substances (PFASs).

The risk that these substances present to human health, as well as that of flora, fauna and marine life, is acknowledged by the Australian Government: 'The toxicity, mobility, persistence and bioaccumulation potential of PFASs pose potential concerns for the environment and for human health.' (Australian Health Protection Principal Committee Per- and poly-fluoroalkyl substances (PFAS) FactSheet, Australian Government Department of Health)

The tide will carry the disturbed material towards Spit Bridge and beyond, and so this presents a major problem for communities that spend time in Middle Harbour, Spit Marina, Sandy Bay and Clontarf Beach and Children's Ocean Pool. The control of sediment, silt and sludge by means of floating curtains around the construction site in Middle Harbour presents a serious challenge. For example, silt curtains are set to descend only 12m in an area of depths of up to 34m. The contractor will not be able to provide a guarantee that the levels of toxins in the waters of Sandy Bay and Clontarf Beach will be within safe levels.

The risk this presents to the community is so vast, unavoidable and long-lasting that it is simply unacceptable.

### **High risk to human health from emissions stacks at Seaforth and Balgowlah**

I object to the Beaches Link Tunnel because the particulate matter distributed into the air by the emissions stacks at Balgowlah and Seaforth will endanger the lives of both children and adults in a 1.2km radius.

The project includes a proposed emissions stack located on the current site of the Balgowlah Golf Course. This stack will be an eyesore – at 6.5 stories high, there is nothing in the near vicinity of similar height and it will be an ugly blight on the landscape.

But far worse than that, it will be pumping unfiltered particulate matter into the air for a radius of 1.2km. Many children, including my own, live and go to school within that radius. Balgowlah Boys Campus, with its 1200 students, is only 322 metres from the proposed emissions stack.

Particulate matter has been shown to contribute to illness and cause death in children. In 2013 a 9-year-old child, Ella Kissi-Debrah, died in the UK following a severe asthma attack, and in December 2020 a court made a landmark ruling that air pollution made a material contribution to her death. The coroner Philip Barlow said that the child was exposed to an excessive level of two air pollutants - nitrogen dioxide, a toxic gas largely emitted by diesel vehicles, and particulate matter.

Despite the Government's claims that filtration of the stack's emissions is not necessary, the EIS acknowledges that the increased particulate matter in the air as a result of the emissions stacks will impact on the health of children in the surrounding area. It models increased hospitalisations for children aged 0-14 and increased deaths at the Seaforth Public School community receptor site (EIS, Appendix I, p64). This is shocking. It is not acceptable to put children's health at risk in this way. The tunnel is not worth more than a child's life. I would prefer that the emissions stacks not be built at all, but at the very least, they must be filtered.

### **High risk to grey-headed flying foxes (a threatened species) at Burnt Bridge Creek**

I object to the Beaches Link Tunnel because the construction and operation will endanger the protected grey-headed flying foxes at Burnt Bridge Creek.

The EIS states that 'substantial base flow impacts at Burnt Bridge Creek are also expected during the operational phase with up to a 96 per cent reduction being modelled.' (EIS, Appendix O, page xi). It then goes on to admit that 'this could impact ecosystems reliant on the water within these creeks.' (EIS, Appendix N, page x). One example (and there are many) of the native fauna reliant on that water is the Burnt Bridge Creek grey-headed flying fox camp.

The grey-headed flying fox (*Pteropus poliocephalus*) is a threatened species, classified as vulnerable, and subject to protection both at a state and national level. Grey-headed flying foxes are classified as a 'landscape-managed species' and a targeted strategy for managing their survival has been developed under the NSW Office of Environment & Heritage's Save Our Species program. The program recognises that landscape-managed species such as the grey-headed flying fox are 'subject to threatening processes that generally act at the landscape scale (e.g., habitat loss or degradation)'. I would suggest that the Beaches Link Tunnel construction site at Balgowlah Golf Course constitutes a 'threatening process at a landscape scale' in this context.

Looking specifically at the impact the tunnel construction will have on the water in Burnt Bridge Creek (which is a 79 per cent reduction in baseflow at the end of construction (EIS, chapter 17, p49) and a 96 per cent reduction in flow after 100 years of operation (EIS, chapter 17, p57)), note that 'alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands' was listed as a 'key threatening process' on Schedule 3 of the Threatened Species Conservation Act 1995. The impact that the tunnel project will have on Burnt Bridge Creek, as it is described in the EIS, would clearly be described as 'altering its natural flow regime', therefore presenting a 'key threat' to Balgowlah's vulnerable grey-headed flying fox population. Therefore, I would suggest that tunnel contravenes the Threatened Species Conservation Act 1995.

### **Unknown environmental impact at Manly Lagoon, Queenscliff, North and South Steyne Beaches**

I object to the Beaches Link Tunnel because of the impact construction will have on the ecosystems and water quality of Manly Lagoon, Queenscliff and Manly Beaches.

According to the EIS, the tunnel construction site at Balgowlah Golf Course is set to pump 428,000 litres of wastewater into Burnt Bridge Creek every day, five or six days a week, for four years (EIS, chapter 17, page 44). Burnt Bridge Creek drains into Manly Lagoon, which leads to Queenscliff, North and South Steyne Beaches (also known as Manly Beach). The EIS states that the wastewater will be treated, but it's hard to imagine that the water quality at Queenscliff Beach will remain unaffected by such huge quantities of construction wastewater pumped into it every single working day for four years. But since the EIS does not contain any information, modelling or assessment of the impacts of the wastewater on the catchment downstream of Burnt Bridge Creek, its effect on the lagoon and beaches remains unknown.

Add to this that the EIS predicts a reduction in the baseflow of Burnt Bridge Creek of up to 79 per cent during construction, and up to 96 per cent after 100 years of tunnel operation (EIS, chapter 17, pages 49 and 57). The creek will effectively become little more than a stormwater drain.

The EIS fails to assess what impact this massive reduction in the creek's flow will have on every person, creature, and body of water downstream of the creek, including Manly Lagoon, Queenscliff, North and South Steyne Beaches. The long-term effects are a scary unknown, completely ignored by the EIS.

The project cannot ignore the effects of the tunnel's construction and operation on the environment downstream of Burnt Bridge Creek. A proper environmental assessment of the impacts on Manly Lagoon, Queenscliff and Manly beaches needs to be conducted. The NSW Government needs to devise systems to monitor pollution levels in these waterways as well as mechanisms to find and stop the source of pollution if and when it occurs. Our community needs a guarantee that these waterways, including our beloved beaches, will not become polluted, and will remain safe for swimming and abundant in biodiversity.

### **High risk to biodiversity and human health at Manly Dam**

I object to the Beaches Link Tunnel because it will pollute Manly Dam. Work to widen the Wakehurst Parkway will result in uncontrolled flows of water into the dam during periods of heavy rain. Not only will Manly Dam no longer be safe for people to swim in, but biodiversity will also suffer. The only landlocked population of native Climbing Galaxias fish in Sydney live in Curl Curl Creek, part of the Manly Dam catchment. According to the Australian Museum, it is one of the most northern recorded Australian populations of Climbing Galaxias. They will most likely be eliminated should the water in the dam become polluted by the works associated with the tunnel project. The NSW Government needs to guarantee that the Manly Dam catchment area and its water will not become polluted. It needs to devise systems to monitor water pollution levels as well as mechanisms to find and stop the source of pollution if and when it occurs.

### **Failure to fulfil stated objective of reducing traffic and travel times**

I object to the Beaches Link Tunnel because it doesn't stand to effectively reduce traffic and travel times from the Northern Beaches to the city.

I remain unconvinced that the traffic modelling used in the EIS is sufficiently accurate and reliable; it fails to take into account so many factors, including:

- The 'work from home effect' brought about by the coronavirus pandemic. Fewer people are commuting, and there are signs this trend might be here to stay. Further research and modelling are required to determine the extent of the 'work from home effect', and whether building a new car tunnel is necessary given the changed commuting patterns.
- Induced demand, where building a new road simply leads to more traffic and so any predicted reduction in travel time is soon absorbed. This is a well-known phenomenon, and there are plenty of examples where this has occurred in other parts of Sydney. Some experts predict that traffic problems will return to current levels within two years of the tunnel opening.

The EIS states that the traffic along Military Road will fall by 11% once the tunnel project is completed. Even assuming the modelling is accurate, and this forecast reduction does come to pass, I do not believe that this fractional traffic reduction warrants the vast expense, irreversible environmental degradation, adverse effects on human health and loss of quality of life that this tunnel will cause should it go ahead.

### **Failure to consider public transport**

I object to the Beaches Link Tunnel because it promotes private car usage over public transport, and so will contribute to climate change.

97 per cent of climate scientists the world over agree that climate change is real, and human activity is its cause. Given what we know, we could be designing and building a world-leading mass transport solution that will sustain commuters and visitors to and from the Northern Beaches for many years to come, whilst also leaving a smaller carbon footprint.

There has been no comparison of the tunnel project to a mass transport alternative in terms of its impact on local traffic, biodiversity, disruption, climate, waste, contamination, air pollution and effectiveness as a congestion solution. A fair study and comparison should be undertaken and published for public consumption before any tunnel project goes ahead.

### **Promoting dangerous traffic 'rat-running' in residential streets**

I object to the Beaches Link Tunnel because the construction and operation will increase traffic in residential streets in Balgowlah, making our streets less safe for pedestrians, increasing noise in our homes and impacting the value of our properties.

My husband and I enjoy walking our young children to school, to visit their grandparents who live about 100 metres from us and to the shops at Balgowlah Heights. All of these activities require us to cross local residential streets. Thanks to the tunnel, many of these streets, including New Street West and Upper Beach Street, are set to become traffic rat runs. During the construction phase, motorists will be attempting to avoid the increased construction traffic, including slow heavy trucks, on Sydney Road. Once the tunnel is operational, motorists will use New Street West, Upper Beach Street and Maretimo Street, and their feeder streets, to access the link road through the golf course, and avoid the increased traffic on Sydney Road accessing the tunnel.

Motorists already drive too fast as they accelerate in a westerly direction away from the Balgowlah Heights shops. To have an increased number of vehicles using New Street West as a thoroughfare, driving fast as they attempt to get wherever they're going in the shortest amount of time possible, will make our streets more dangerous for pedestrians. It will make our home noisier, and it will negatively influence the value of our property.

Beyond acknowledging that traffic congestion will increase in Balgowlah during tunnel construction and operation, the EIS fails to assess the extent of the impact of the tunnel's construction and operational phases on the traffic in local residential streets. Rather, it is palmed off as a problem for the Northern Beaches Council to address. The NSW Government needs to fund traffic amelioration measures, such as speed bumps in local streets, to address the new local traffic problems that the tunnel will introduce.

### **Dangerous link / access road intersection on Sydney Road opposite Maretimo Street**

I object to the Beaches Link Tunnel because the link / access road connecting Sydney Road with Burnt Bridge Creek Deviation through the current Balgowlah Golf Course, complete with traffic lights on Sydney Road opposite Maretimo Street will:

- Make pedestrian activity around Maretimo Street and Sydney Road, particularly the movement of students arriving at and leaving Balgowlah Boys Campus, less safe
- Reduce the air quality in the area of the Maretimo Street / Sydney Road / link road intersection as more vehicles idle at the lights
- Increase traffic rat-running on Upper Beach Street, New Street West and Maretimo Streets and their feeder streets

The location of this road, and the traffic lights on Sydney Road and Maretimo Street, needs to be reconsidered in light of the danger it will place on school students and other pedestrians.

### **Suspicious and worrying lack of community receptor at Balgowlah Boys Campus**

I object to the Beaches Link Tunnel because there is no community receptor at the Balgowlah Boys Campus. If there is a site that warrants a community receptor, surely it is a school with 1200 students directly adjacent to the Balgowlah Golf Course construction site, and only 322 metres from the planned emissions stack. It is frankly deceptive to not have a community receptor located at Balgowlah Boys.

### **High risk to physical and mental health at Balgowlah Golf Course construction site**

I object to the Beaches Link Tunnel because the 6-plus years of construction at the Balgowlah Golf Course will generate an unhealthy and unacceptable level of dust and noise and will create local traffic congestion and parking problems.

Local residents and the Balgowlah Boys Campus will be affected by the dust generated by the demolition, earthworks and surface construction works planned for the Golf Course site. This presents a risk to human health, particularly as the EIS states that there is the potential for the dust

to contain contaminants such as asbestos fibres or organic matter stirred up through the disturbance of contaminated soils.

The EIS states that an average of 2.5 vehicles, including heavy vehicles, will be leaving the construction site every minute, possibly more at peak times. This will lead to a huge increase in local traffic, increasing noise levels, making travel times slower, air quality poorer and pedestrian activities, such as students arriving at and leaving Balgowlah Boys, less safe.

According to the EIS, more than 4000 homes will be subject to noise increases due to the construction at the golf course site. Balgowlah Boys Campus will also be subject to an increase in noise levels of up to 16dB as the students try to learn and sit exams. The construction noise, which will be constant during the long working hours, poses a high risk to the mental health of residents (many of whom will be working from home to avoid the traffic snarls caused by the tunnel construction) and Balgowlah Boys students and staff.

Hundreds of workers arriving at the site every day will need parking for their own private vehicles, and so local streets will be turned into parking lots, with no parking left for residents and their visitors.

The dust, noise, traffic and parking problems all equate to unacceptable risks to physical and mental health and a greatly reduced quality of life for people living within 2 kilometres of the Balgowlah construction site, as well as the staff and students at Balgowlah Boys Campus.