

Submission  
No 472

## INQUIRY INTO IMPACT OF THE WESTERN HARBOUR TUNNEL AND BEACHES LINK

**Organisation:** Save Flat Rock Gully and Middle Harbour

**Date Received:** 18 June 2021

---

The Hon. Daniel Mookhey MLC  
Chair  
Public Works Committee  
NSW Legislative Council  
Parliament House  
Macquarie Street  
SYDNEY NSW 2000

18 June 2021

Public.Works@parliament.nsw.gov.au

<https://www.parliament.nsw.gov.au/committees/inquiries/Pages/inquiry-details.aspx?pk=2767#tab-submissions>

### **Submission to the Inquiry into the Impact of the Western Harbour Tunnel and Beaches Link**

Dear Members of the Public Works Committee,

Thank you for this opportunity for the **Save Flat Rock Gully and Middle Harbour** Group to voice our concerns to the Inquiry on the impacts of the Western Harbour Tunnel and the Beaches Link.

We are a group of residents who have come together to analyse the impacts of the Beaches Link Tunnel proposal with the help from technical experts and local historians, particularly as it relates to Flat Rock Gully and Middle Harbour.

Flat Rock Gully sits within the catchment of Long Bay, a large and increasingly rare urban wildlife corridor. Flat Rock Creek is classified as a sensitive fish breeding habitat and wildlife conservation area which supports endangered species. The catchment borders 7 suburbs, is in proximity of 5 major playing fields, contains groundwater dependent native bushland and is 5 minutes from Sydney's centre. It is one of the last remaining wildlife corridors between Lane Cove National Park and Middle Harbour.

The proposed dive site is located in the catchment, which runs down through Flat Rock Gully, under the heritage listed Suspension Bridge and through Tunks Park to Middle Harbour. The catchment also plays host to Australia's largest netball club, baseballers, schools, water-based clubs, bushcare groups and walkers from near and far.

The earliest evidence of the Cammeraygal living in the area is found in a large cave in Cammeray dating 6000 years. There are also sites in Flat Rock and Clive Park that are under threat from the project. The last known groups living on the North Shore have been at Quaker's Hat and Flat Rock Gully (1890)

Middle Harbour is the breeding and fishing grounds for our precious Sydney Harbour wildlife. Its ecosystem provides just the right conditions for mangroves and seagrasses that provide precious habitats for seahorses and others.

The Beaches Link will see the harbour dredged and with that comes the remnants of tip run off and industrial past. Contaminants dangerous to human and waterway health have been detected and the risk of more runoff being added once the tip is opened up is a very real risk.

The Save Flat Rock Gully and Middle Harbour group submitted a detailed submission, with photos and a history of the area to the Beaches Link EIS in March 2021. The submission prioritised 8 objections identifying problems and possible solutions with evidence, footnotes and references.

Please refer to <https://www.planningportal.nsw.gov.au/major-projects/submission/783906>

The BL EIS submission is also attached.

**This submission to the Inquiry will cross reference our BL EIS submission to your terms below:**

**(a) the adequacy of the business case for the project, including the cost benefits ratio,**

No business case has been released to the public. Reported cost at the time of printing is \$14-\$15 Billion for both projects.

- The business case needs to be released to the public ensuring all costs are accounted for e.g.) contamination mitigation, utilities remediation, coinciding development risks, health and the environment (refer page 12)
- Data needs to be published that underpins travel time savings and congestion reductions claimed in the form of a business case (refer page 26)
- Objection 7: outcomes are poor and benefits claimed are not evidenced (refer page 24)

**(b) the adequacy of the consideration of alternative options**

Alternative options have not been comprehensively scoped or compared to a toll road tunnel option. The option to address congestion via a dedicated mass transit solution ie) light rail, metro or rail has not been adequately considered.

- Complete and publish an alternative mass transit study which demonstrates that the project is a superior option in terms of travel time savings, VKT's, emissions, congestion and access to work. (refer page 12, 26. Consider ecologically sustainable alternatives to the car tunnel (refer page 21)
- A road project should not be allowed to contribute more to an area already struggling with poor pollution levels particularly when it is evident that a mass transit alternative has the capacity to reduce those levels (refer page 17)
- The Beaches Link is addressing an ever-decreasing problem as less people are travelling to and from the city from the Northern Beaches. A dedicated public transport alternative along the Dee Why to Chatswood or Mona Vale Rd to Macquarie Park would better address traffic trends and relieve congestion (refer page 25)
- Objection 8 : Climate and sustainability of the project is very poor and viable alternative solutions have not been seriously considered (refer page 27 and 28) for the following reasons:
  - The project induces demand/ increases vehicle reliance
  - The project contradicts governments own climate change goals
  - Road Tunnels have a high resource, waste and emission profile
  - Sydney already has a significant transport emissions problem
  - Sydney is out of space, tunnels to congested centres don't fix that, they create more parking pressure and pressure on our green spaces.
  - The EIS does not benchmark the project against a public transport alternative
  - Government legislation is not met by the project such as the Protection of the Environment Administration Act 1991 (NSW)
  - No accounting for loss of major carbon capture ecosystems
  - Toll road tunnel contracts incentivise car use
  - Transport emissions our second fastest growing emission sector after energy and EV uptake alone won't fix the problem
- The scale of groundworks in and around Sydney's foreshore with the BL would result in an unreasonable level of disruption and damage (refer page 16). Alternate routes need to be

assessed that do not result in significant drawdown under homes and parks and cross uncertain geology.

**(c) the cost of the project, including the reasons for overruns,**

The project admits that further testing and risk assessment is required to fully assess multiple levels of risk including serious contamination found in the Harbour and at Middle Harbour dredge sites and dive sites such as Flat Rock Gully (ex-landfill). Cost blow outs and delays associated with other projects have occurred due to unexpected or unmitigated contamination eg West Gate Tunnel, Victoria.

- **Objection 1: Under-scoped and under-assessed risk (refer page 10) and include:**
  - Contaminants that present a known risk to human health (PFAS, Heavy Metals, tributyltin) have been detected via limited sampling in Middle Harbour however further testing to attain a scientifically valid sample size and quantify risk was not completed
  - The Utilities assessment has not assessed the potential conflict between the tunnel and the substantial Northside Storage Tunnel which holds up to 500 Million Litres of Sewage and Wastewater in the same location (Artarmon, Naremburn, Tunks Park, Middle Harbour). A failure to assess potential impacts could lead to further health and safety risks, under costing and delays. The community has recently experienced several overland sewage spills which has impacted bushland and sports fields and resulted in a restriction on use of greenspace. A feasibility assessment should be undertaken with regard to placement of two tunnels in the same location that covers drawdown impact, vibration, tunnelling impacts etc We do not believe that it is safe or financially feasible to place both tunnels in the same location.
  - Substantial drawdown and settlement has been noted within the EIS in and around Flat Rock Gully and surrounding suburbs (20 mtrs +).
  - The extent and composition of the landfill site is under-scoped
  - The understanding of the interconnectedness of the Flat Rock Dive Site to it's surrounds is not sufficiently recognised to accurately assess risk. There are cumulative risks associated with the fact that the proposed dive site sits in Middle Harbours catchment, on Flat Rock creek, in a flood zone, a previously unregulated tip site, surrounded by homes and sports fields.
- **Objection 2: Significant Contamination Risks in a known area of sensitive receivers and environments supporting endangered species (refer page 13) including:**
  - There was a Declaration of Remediation Site under the Contaminated Land Management Act in 2003 in relation to Tunks Park due to contaminated fill material, sediment and groundwater posing a danger to human health. This contamination presumably originated upstream ie leachate from the old tip site under Flat Rock Reserve and Bicentennial Reserve. Disturbance of the tip site further risks this important sports field and the Harbour
  - Current EPA Declaration: In response to the EIS, Willoughby Council has notified the EPA under the Contaminated Lands Act that the groundwater upstream of the Flat Rock Reserve (at Bicentennial Reserve) site is contaminated. The EIS recognises the risks of this leachate moving downstream once the site is disturbed. Further notifications will be required upon confirmation of dive site contamination.
  - Risk to Workers: The risk to workers coming into contact with the contamination is rated as moderate to high and the EIS states more testing is needed to quantify the risk. Workers have not been considered in the Health assessment.
  - Contaminated Samples in Middle Harbour
  - The EIS needs to be reissued for Public Consultation following a full phase 2 contamination assessment: All further testing mentioned in the EIS should be done now and the results released. The revised EIS should be exhibited so that the public can comment on the adequacy of proposed management strategies and the likely impact to

the community. The assessment should include a landfill gas study in compliance with Hazardous Ground Gas Guidelines for construction and operation of tunnel (page 14).

- Risks to Aboriginal heritage sites have been identified at Clive Park (there are several), Flat Rock Gully (1 with the potential for more). The cost of mitigating and repairing damage to these culturally significant sites needs to be budgeted.

**(d) the consideration of the governance and structure of the project including the use of a 'development partner' model,**

- Tolling impacts are not modelled - Costing and placement of toll gantries is essential to modelling traffic flows and predicting toll avoidance. Given most contracts are over a 40-to-50-year term with a min. annual % increase it appears some level of toll avoidance will be unavoidable. The issue is that due to the route chosen this avoidance will occur in highly residential areas in Sydney's largest school zone (refer page 24)
- Toll road tunnel contracts incentivise car use - all previous toll road contracts in Sydney have included (at least) annual increases over a period of 40-50 years (refer page 27). This provides a disincentive to the provision of public transport options. It is unclear whether privatised buses will be able to use or afford the toll road.
- Do not allow a "conflict" clause in toll road contracts preventing the development of public transport (refer page 28)

**(e) the extent to which the project is meeting the original goals of the project,**

- Objection 7: Outcomes are poor and benefits claimed are not evidenced (refer page 24) specifically including
  - Surface Level Traffic unsubstantiated as did not include all major roads in the operational modelling.
  - Outdated data - The Beaches Link traffic modelling is based on 2011 and 2016 data. Much has changed since this time and the impacts of Covid have not been fully realised. Whilst there is a temporary mode shift to vehicles, many have not returned to the office and vacancy rates in the city remain high
  - No local access or travel time improvement for impacted communities with limited entry points for the BL
  - Does not address local congestion on the North Shore and appears to make it worse: several local intersections fail or will experience a worse level of service both during and after construction as a result of the project
  - Does not address Military Rd congestion issue - once the Western Harbour and Beaches Link projects are built the EIS demonstrates that Military Rd will sit at roughly the same level of traffic as today and be slightly worse ten years after opening.
  - Increased Traffic to Beaches and around Warringah Freeway
  - Parking at breaking point in Sydney

**(f) the consultation methods and effectiveness, both with affected communities and stakeholders, (refer page 10)**

- Community representatives of the most impacted suburb (eg Naremburn) and the Gully were not been included in the TfNSW consultation sessions
- During Cammeray sessions the potential impacts to Tunks Park were deemed out of scope of the discussions (despite Tunks being in Cammeray) and during the Northbridge/ Willoughby Session impacts to Naremburn were not discussed. There was no opportunity to discuss these impacts during the consultation sessions provided and many community members reported that answers to their questions were not received
- Communities have been rushed through consultation with the release of a 12,000 paged EIS at the time schools were breaking up for Christmas after a difficult pandemic year

**(g) the extent to which changes in population growth, work and travel patterns due to the Covid-19 pandemic have impacted on the original cost benefit ratio, refer page 24**

- Outdated data - The Beaches Link traffic modelling is based on 2011 and 2016 data. Much has changed since this time and the impacts of Covid have not been fully realised. Whilst there is a temporary mode shift to vehicles, many have not returned to the office and vacancy rates in the city remain high
- There has been a significant mode shift to active transport and a renewed demand for local centres and green spaces as a result of Covid. These factors should be considered to ensure we are planning a project for the future not the past.

**(h) whether the NSW Government should publish the base-case financial model and benefit cost ratio for the for the project and its component parts,**

The project will cost approx. \$1 Billion per Km. The NSW Government should publish the base-case financial model and benefit cost ratio for the for the project and its component parts and then conduct community consultation for feedback

- Refer to Terms of Reference (a) above

**(i) whether the project is subject to the appropriate levels of transparency and accountability that would be expected of a project delivered by a public sector body,**

- The failure to publish the business case, and the failure of the EISs to include relevant matters means that the projects fail to meet the levels of transparency and accountability which taxpayers are entitled to expect.
- The failure to consider and compare alternatives becomes of particular concern given the failure to release the business cases justifying the projects.

**(j) the impact on the environment, including marine ecosystems,**

Environmental impacts include marine life, heavy tree losses, contamination risks, air quality, biodiversity offsets and an overall increase in emissions. The Western Harbour and Beaches Link tunnels will produce more emissions than the Southwest Metro (approx. same distance) before adding cars. Lighting, emergency systems, ventilation fans and the concrete itself (larger than metro/ rail tunnels) all contributes to a higher emissions profile.

- Objection 5: Biodiversity is significantly and unnecessarily impacted (refer page 20)
  - Clearing urban bushland - bushland set aside for environmental protection should not be destroyed or disturbed
  - Flat Rock Reserve is a declared Wildlife Protection Area as it provides significant habitats that support a wide range of plants and animals
  - Flat Rock Gully is a key part of the network of wildlife corridors across Sydney required to maintain biodiversity
  - Flat Rock is a groundwater dependant ecosystem – disturbances of groundwater may impact the whole ecosystem
  - The use of the controversial biodiversity offsetting policy allows for the clearing of bushland in urban communities
  - EIS acknowledges that animals and birds on the construction footprint and nearby bush reserves will be driven away, in some cases permanently
  - The proposed mitigation measures to protect wildlife during construction are weak.
  - The health of local creeks, waterways and the marine environments are at risk from scouring, elevated salinity, siltation, contamination
  - Decision-making about the future of the cleared bushland at FRG should not be left to the end of the construction process
  - Flat Rock Creek is classified as a sensitive fish breeding habitat which feeds out into Middle Harbour. Seagrasses and Mangroves in Middle Harbour support an abundance of

sea life, and these are under threat from the project. In addition to the contamination, dredging and noise impacts the remaining sill in Middle harbour from the Immersed Tube is likely according to the EIS to create water quality issues further risking marine life.

- It is not clear why an Immersed Tube is considered an ecologically sound approach when it was rejected for the main Harbour.
- Objection 3: The scale of Groundworks in and around Sydney's Foreshore which would result in an unreasonable level of disruption and damage (refer Page 15) including:
  - 153,000 m3 of sediment will be dredged from Middle harbour and disposed of at sea.
  - Natural Flow Rate Reduced. There will be 39% reduction in the natural flow of Flat Rock Creek which will impact ecosystems.
  - Water drawdown is estimated to flow into tunnel at a rate of 1.39L/s/km. 711,000 L from the tunnelling will be discharged down Flat Rock Creek each day during construction. It is not clear if the water will be adequately treated.

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

- Objection 4: Unacceptable health and safety risks (refer page 17) for Flat Rock including:
  - Construction Noise: The Flat Rock site and surrounds will experience the highest noise during day-time clearing, excavation, establishing buildings and widening of the road which is estimated to last for 9 months. This area will be subject to considerable coinciding impacts from the Warringah Freeway Works, the Willoughby Leisure Centre Development and the Channel 9 Site as well as ground born noise and vibration from tunnelling. These considerable and long duration works in and around a gully which is known to amplify noise is a considerable health risk
  - Truck Noise: A key concern at Flat Rock Drive is the noise generated from truck air brakes as they slow down the long hill leading to the excavation site entry point at the bottom, and then the exhaust and engine noise from those fully loaded trucks accelerating up the hill from the site. Noise will also impact wildlife in the area esp. nocturnal species
  - Sustained Noise Impacts on Sporting Fields and Surrounds: the EIS states that Bicentennial Reserve, the Baseball Diamond, Cammeray Oval and Shore Oval will experience noise impacts across the duration of the project (5 years)
- Objection 3 (refer page 15) for Middle Harbour
  - The works on Middle Harbour will extend across 4.5 years and noise is modelled to be considerable across most foreshore areas surrounding the dredging site. The installation of Cofferdams and Immersed Tubes will be particularly noisy, and vibrations may impact property and historic sites. The works will require respite periods and, in some instances, will create noise of up to 75 dB significantly impacting both residents and marine life.
  - Reconsider the Immersed Tube crossing due to the considerable vibration, noise and contamination impacts around Middle Harbour

**(l) the impact of the project on nearby public sites, including Yurulbin Point and Dawn Fraser Baths, and**

- Aboriginal Heritage in Flat Rock Gully near the dive site - The Cammeraygal people called Flat Rock Creek – “Mugga” meaning diamond python, which is the totem of the Cammeraygal. There was an aboriginal community living in Flat Rock Gully up until the 1890s. There are still remnants of cultural significance in Flat Rock Gully including cave paintings of a diamond python that have

been dated at over 5000 years. The BL EIS has concluded there is potential for archaeological deposits in the area. (BL EIS Table 15-2). The placement of the dive site could disturb these areas of cultural significance.

- At Clive Park there is significant Aboriginal and Natural Heritage, including an overhanging rock and cave that could be damaged by vibrations as this is where the tunnel meets the immersed tubes to cross Middle Harbour.
- Middle Harbour and Spit Reserve - contamination 4.5-5 years noisy works, impacting on activities at Northbridge Baths and other water sporting clubs such as Northbridge Sailing Club and the 1<sup>st</sup> Northbridge and Sailors Sea Scouts.

We are happy to have the group's name published and for a representative of the group to be called as a witness to the Inquiry.

Yours Sincerely,

Save Flat Rock Gully and Middle Harbour

