

Submission
No 388

INQUIRY INTO IMPACT OF THE WESTERN HARBOUR TUNNEL AND BEACHES LINK

Organisation: Save Manly Dam Catchment Committee

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17th June 2021

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



Public.Works@parliament.nsw.gov.au

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

Save Manly Dam Catchment Committee - 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 the opportunity to submit to an inquiry regarding these environmentally destructive projects. We strongly object to the Western Harbour Tunnel (including the Warringah Freeway Upgrade) and Beaches Link (including the Gore Hill extension) projects and urge you to recommend that the NSW Government abandon these plans immediately.

This submission is on behalf of Save Manly Dam Catchment Committee (SMDCC)

We object to the development of the Beaches Link Tunnel in particular due to the environmental impacts for the Manly Dam Catchment as described by the Environmental Impact Statement (EIS) for the Beaches Link Tunnel.

SMDCC Objects/Charter are as follows:

- (a) To preserve the Manly Dam catchment, its bushland, creeks, flora, fauna and historic sites and to seek to reduce pollution and desecration of these.
- (b) To preserve, restore and improve bushland and wildlife corridors connecting the Manly Dam Catchment to Garrigal National Park and other nearby bushland.
- (c) To gather scientific and other information relating to the past and present condition of the Manly Dam Catchment.
- (d) To support fund raising to achieve a sustainable natural environment in this region.
- (e) To support the identification of all aboriginal, cultural, ecological, historical and recreational artefacts, places, rock carvings, trails and other items consistent with the natural and social values of the Catchment.
- (f) To encourage study of the sources and types of pollution impacting on the Curl Curl Creek and Manly Reservoir environment and to press for measures to control and alleviate such pollution.
- (g) To use this information to consult and co-operate with all relevant authorities in all matters affecting the welfare and beauty of the catchment system and environs.

(h) To develop and have implemented comprehensive management plans and plans for the improvement and continued care of the bushland, creek and reservoir ecosystem and keeping their special character, recreational and community amenity.

(i) To raise a greater public awareness of the need to maintain the reservoir and bushland in a healthy state.

(j) To communicate with and seek affiliation with other environmental protection organisations.

(k) To carry out rehabilitation and regeneration work in the Manly Dam Catchment.

(l) To work through the schools and other youth organisations in the Catchment to educate children and hence their families about the impact of their activities on the catchment.

(m) To support Total Catchment Management in the Sydney Northern Beaches area.

(n) To use research, advocacy and fundraising to assist with Planning and Environmental Law reform.

Introduction:

A road tunnel sounds a good idea. Get cars off the road and underground where they will do little environmental damage. The problem is that tunnels need to come to the surface and that's where the problems start.

The Beaches Link makes Wakehurst Parkway one of the two main feeder roads into the tunnel. It will be widened to 4 lanes for about two-thirds of the length of the project and 5-6 lanes for the other third.

Since it runs along a narrow ridge between two environmentally sensitive regions, Manly Warringah War Memorial State Park and Garigal National Park, widening Wakehurst Parkway means it will be built above the bushland in a number of places.

The road will be visible throughout Manly Dam and surrounds. Noise from the bigger road with its construction trucks, lights from cars and street lights, and water runoff from the road will all significantly impact upon flora and fauna in the region, not to mention turn a quiet area into an unpleasant industrial highway.

There are many other concerns with the tunnel as well, such as the destruction of Burnt Bridge Creek, ventilation towers near schools, toxic mud in Middle Harbour and more traffic and less parking. Against this, the project appears to offer minimal time savings in travel and little economic benefit for an enormous investment.

We are not opposed to a tunnel as such but we are opposed to the design of this tunnel.

The NSW government seems to be in a rush to push through this project and has given 62 days to respond to the 12,000 page EIS.

Overall, in the EIS, there appears to be a dissonance between the low environmental risks (incorrectly) assigned by the EIS, and the high risk indicated by the real-world data within the report.

The SMDCC strongly requests that if the proposal were to proceed, then TfNSW guarantees that the proposal will not impact the MWWMSPP during either the construction or operational phase of the proposal.

Our reasons are further outlined in relation to the Committee's Terms of Reference.

We have previously submitted detailed submissions as to why we object to these projects. Please find attached our concerns from our submission referenced to your terms below:

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

Biobanking & Offsetting impacts? Can a government just buy its way out of driving extinctions? At what cost should Biobanking ever be considered?

Pages 183 and 187 of Appendix S say "The majority of the project avoids surface impacts to the terrestrial biodiversity values by tunnelling". Yet p182 says "Wakehurst Parkway is where the most biodiversity impacts occur". SMDCC is perplexed that the tunnel would end exactly in the very place where the most biodiversity occurs. This appears to be totally hypocritical! We understand that "community consultation" occurred to move the site from the Seaforth Oval carpark and further away from residents – this is well marketed in all the glossy brochures. However, we are very disappointed that the environment always takes 2nd or even last place in these considerations.

Just like in most destructive projects in NSW the proponents are legally allowed to "offset" the loss of threatened species and endangered ecological communities by purchasing what's known as "Biobanking" credits. This supposedly protects another area to make up for the loss. It sounds ok on paper but, in reality, this is a deeply flawed system established to facilitate development in sensitive environments. None of these options benefit the actual site or area which is being so dramatically impacted (destroyed) by the construction activities and road operation.

For example, this project will destroy habitat for six identified threatened fauna species in or next to the construction footprint. (plus, an additional threatened species that has been omitted [The Eastern Bent-winged Bat]).

They are the Grey headed Flying Fox, Rosenberg's Goanna, The Powerful Owl, large Bent-winged bat, The Little Bent-winged bat and the Large-eared Pied bat. Six other threatened species are deemed highly likely to occur in the construction footprint including the Eastern Pygmy Possum and the Red Crowned Toadlet. There is also a threatened flora species next to Wakehurst Parkway - The Magenta Lilly Pilly (*Syzgium Paniculatum*) that will be destroyed. **The total number of eco system and threatened species credits required will be 4411.**

So a government can just buy its way out of driving extinctions?

<https://theconversation.com/biodiversity-offsets-could-be-locking-in-species-decline-14177>

SMDCC does not support Biobanking. "Biobanking" is not leading to improved environmental outcomes, it is endorsing local extinctions and rubber-stamping biodiversity destruction.

Modern infrastructure projects should surely protect and retain threatened ecosystems and sensitive environments-not use them as collateral damage.

An Australian Conservation Foundation report 2020 called "The Extinction Crisis in Australia's Cities and Towns" says this: "*While our national parks and wilderness areas are essential for protecting biodiversity, our cities and towns also provide critical habitat for threatened species. In fact, 25% of Australia's nationally listed threatened plants and 46% of threatened animals can be found in our urban areas.*"

Please look for ways to reduce the impact on the bushland along Wakehurst Parkway and the species that live within it.

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 i.e. light rail, metro or rail has not been adequately considered.

The concept uses antiquated and destructive solutions to solve a transport problem. However, if the tunnel was built for public transport only (as is the case in Brisbane) then all the harmful ancillary road infrastructure would not be required.

Establishing a proper public transport corridor from Dee Why to Chatswood would also alleviate congestion, and provide sensible connections to a proposed Frenchs Forest Hub.

Alternatively, the tunnel exit could be moved from Wakehurst Parkway at Seaforth to the Warringah Road intersection at Frenchs Forest so that the delicate environment of Garigal National Park and Manly Warringah War Memorial Park (including the Sydney Water site at North Balgowlah) is not seriously harmed.

This might be more expensive but money would be saved in road construction, underpasses, bridges, water quality ponds, bio-banking credits etc. whilst priceless biodiversity would be protected. It would also lessen the steep road gradient which exacerbates emissions from trucks climbing up the hill.

Additionally, we believe the tunnel is of poor design for the following reasons and these issues have not been addressed by alternatives:

- Beaches Link is the deepest road in Australia and one of the steepest highways. It has underground hills. The road should be as flat as possible.
- Beaches Link is a 6 lane underground highway. It is 50% wider than the Harbour Tunnel but with much less traffic. Is this width necessary?
- The tunnel does not allow bicycles, electric scooters, one wheel boards etc or pedestrians. There is little thought about future transport that might be different from today.
- There are no side exits off Beaches Link along the Lower North Shore. This will mean some traffic for Mosman etc will travel to the Northern Beaches and return West to avoid Military Rd peak hour traffic.
- Entrances and exits to the tunnel are too wide: Crows Nest 20 lanes, Balgowlah 12 lanes, Seaforth 6 lanes.
- The Balgowlah exit is poorly designed. Cars turn 180 degrees then go through two traffic lights to get onto Sydney Rd, then another set of lights to go past Burnt Bridge Creek Drive. It's setting up for traffic jams.
- No dedicated bus lane.
- There is not enough parking in the Northern Beaches already. The tunnel will add to the traffic. We need better public transport first.

This is an extract from Dr Michelle Zeibots submission (no 497 p12) to the WestConnex 2018 Inquiry. At the time she was the Research Director at the UTS Transport Research Centre.

“4.1 Trunk route development in the northern sector of Sydney

In late 2017, my colleagues and I at the Institute for Sustainable Futures undertook investigations of what we could do at that time about the Western Sydney Harbour Tunnel and Beaches Link. (a full report was referenced but not available from the Inquiry website).

The primary outcome from that investigation was that the option of an extension to the metro rail system from Chatswood through to the Hospital Precinct, Mona Vale and Brookvale should be investigated. Our reasons for this are described and outline in the document attached, but could be summarised as:

- Strategic centre development in the north west and west of Sydney would be better supported by introducing direct rail access to a region that currently does not have any, but is clearly in need of high capacity, mass transit*
- Such a line would also serve people wanting to travel to the major centres of North Sydney and the Sydney Central Business District without having to negotiate the difficult terrain through Military Road*
- The difference this would make to road traffic congestion is likely to be far greater than a continuation of road building due to the ability to introduce fast and stable travel speeds to that sector of the network, thereby offering an opportunity to stabilise the variable speed network at a higher speed during peak periods.*

A key recommendation is that this be investigated as part of current investigations and preparations for any major transport development in that sector.

I would like to emphasise that such an option has significant implications for the development of Parramatta as a second CBD and so while such a project may not appear to help people in western Sydney, it does have implications for whether or not Parramatta would be able to successfully develop as a substantial business district by enabling the catchment area for its workforce to extend to critical parts of the metropolitan region. The ‘science’ around this aspect of urban passenger transport development is explained in more detail in the report.”

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

N/A for SMDCC

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

N/A for SMDCC

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

N/A for SMDCC

(f) the consultation methods and effectiveness, both with affected communities and stakeholders,

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 Baringa Bush Residents’ Group and the Australian Conservation Foundation (Northern Beaches), Manly Warringah War Memorial State Park Advisory Committee (community members) and Northern Beaches Council.

SMDCC presented at a community webinar forum held on the 15th February 2021 alongside these groups. There were over 500 people registered to attend. Here is a link to the webinar with information from a number of community groups who have done their research. <https://www.youtube.com/watch?v=v9phD238Xd4&authuser=0>

Here are some of the Northern Beaches community's concerns and many more were raised during the Q&A:

- The size, scale and design of the ventilation outlets;
- No dedicated public transport lane in the tunnel;
- No clear plans for future clean public transport in the tunnel, such as trackless trams and patronage targets for these;
- Inadequate analysis of increased traffic on local roads, in particular approaching the link road in Balgowlah and associated impacts on residents and local schools;
- Traffic modelling on future transport volumes and impacts for a project of this nature not being far enough into the future;
- A lack of active transport that has been incorporated into the design;
- Impact on mountain biking and walking trails and recreational corridors;
- Protection of flora and fauna in Manly Dam and Garigal National Park;
- Loss of water flow in Burnt Bridge Creek and downstream impacts on Queenscliff Lagoon and local ecosystems;
- The movement of contaminated sediment in Middle Harbour;
- The identification of biodiversity impacts in surrounding areas to the project area not in the EIS;
- Inadequate water quality controls;
- Truck movements removing soil from tunnelling site;
- Contractor parking and impact on residential streets; and
- Project conditions that guarantee the restoration of temporary construction sites post- construction and the delivery of new open space and recreation facilities at Balgowlah.

Many of our members have tried to read the 12,000 page EIS. Many have attended TfNSW sessions and Q&A. We have met with Northern Beaches Council, Zali Steggall and been unsuccessful in being granted a meeting with James Griffin (our local Member and Parliamentary Secretary for the Environment). In all circumstances we have asked for an extension to review the EIS and for further face-to-face consultations to be provided. All requests have been unsuccessful and we are very disappointed.

This is the biggest project to impact the Northern Beaches in the last 50 years and the Community Consultation has been appalling.

Due to Covid-19, we have been unable to hold our meetings and people are suffering from screen fatigue. We have also been limited in our ability to hold any gatherings and it appears that TfNSW is using this scenario to rush through this large project.

“The devil is in the detail” is our greatest fear, and the parts of the EIS that we have read in detail contain some alarming information or under representation of significant impacts. We believe the environmental, health, community and economic costs of the project are unacceptably high and the benefits questionable.

CI4 Construction Complaints fatigue (App Y) – “Complaint fatigue will be managed as outlined in Chapter 7 (Stakeholder and community engagement) of the environmental impact statement. Complaint management tools for the project are outlined in Appendix

E (Community consultation framework). BL/GHF". We would really appreciate some consideration of EIS fatigue and being treated with due respect. The consultation process has been very one-sided and most community members are feeling very sidelined in this process.

Consultation - SE2 Construction Social infrastructure (Appendix Y) –

"Ongoing engagement will be carried out with representatives of user groups and managers of social infrastructure located near surface construction works/construction support sites and sensitive social infrastructure above the tunnel alignment (for example, schools, places of worship, aged care, child care, health and medical facilities) about the timing and duration of construction works and management of potential impacts. BL/GHF"

We seek consultation for SMDCC as outlined in the EIS.

(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,

N/A for SMDCC.

However, it is evident that large numbers of people are now working from home. Additionally, many people enjoyed Manly Dam throughout COVID-19 lockdown and are now more aware of it's role in community recreation and environmental protection.

(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,

N/A for SMDCC

(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,

Access for much larger trucks into Northern Beaches? Is it really for the 23,000 increase in NB population? Who has told the Northern Beaches residents this?

"After the construction phase, heavy industry will be encouraged into the Northern Beaches due to greater access for large articulated trucks (i.e. B-doubles and other higher mass limit vehicles)" (Chap 21.5.5)

Encouraging articulated trucks and construction vehicles to use Wakehurst Parkway could result in accidents and spills that will have significant environmental impacts on Manly Dam and Garigal National Park. A spill of toxic liquid will pour downhill directly into the bush and be extremely difficult to clean.

There will lot of traffic on Wakehurst Parkway. Heavy construction vehicles going 80km/h will dominate the road for the next 30 years. Traffic noise will be heard all across the bush, particularly at night.

This is an extract from the Northern Beaches Council draft submission – *"Of particular relevance to the Beaches Link are the Brookvale-Dee Why and Frenchs Forest Strategic Centres. Both are expected to accomodate a significant number of dwellings over the next 20 years."*

The Beaches Link is designed to allow massive construction at Frenchs Forest. Frenchs Forest will be the only major development in Sydney without a railway. Its feasibility for anything other than a commuter village is doubtful.

Please explain how the Brookvale-Dee Why growth is catered for in any way when the traffic will pour out at Manly Vale and then join the already congested roads of the Northern Beaches – eg. Condamine Street?

Where is this information in the TfNSW marketing program spruiking the 38 minutes savings to the city where the identification of truck movements is noted?

In addition to this there will be the rat-runs and additional construction traffic lights. We are very confused. How come we can cope with this level of added congestion for 5-8 years as we await the full solution?

In addition to this, the Western Harbour tunnel will be being built with all the congestion in those areas. We all know that the impacts of an accident on the Harbour Bridge or the Sydney Harbour Tunnel flow back to the Spit Bridge quite quickly. We are very concerned that concurrent construction will cause traffic chaos throughout Sydney.

If TfNSW is serious about fixing the problems of Sydney traffic – **then please build all these “improvements” gradually or consecutively rather than concurrently.** This would also allow for better utilisation of resources – human and construction – and allow for a better experience for all.

Health impacts neglected in major infrastructure planning - 9 Jun 2021 12:09 am AEST

<https://www.nationaltribune.com.au/health-impacts-neglected-in-major-infrastructure-planning/?fbclid=IwAR3xhWk125DVNuJ6oUmJDGcLGYdrGDH3DpW6GtGAFQw6wBfUapjFdkWh54>

“Health impacts of major transport projects are too often glossed over during the planning phases, allowing issues such as air and noise pollution, residents’ mental health and impact on children’s health to escape the scrutiny they deserve, according to the authors of a new paper published today.

With governments across Australia continuing to commit record sums to infrastructure funding, including numerous large road and rail transport projects, the authors say it is vital that approvals and review processes adequately consider health impacts while there is still time to address them.”

“It’s vital that we learn the lessons of WestConnex. The parliamentary inquiry we studied came after six years of planning, when construction had already started. And yet it uncovered huge public concern over health impacts. Clearly, the public was not consulted early enough,” says lead author Tom Robertson of the University of Sydney’s School of Public Health.

Senior author Dr Patrick Harris of the Centre for Health Equity Training, Research and Evaluation at UNSW Sydney notes that we are currently in the middle of an infrastructure boom, with many projects at the assessment and planning phase.

“These projects will cost billions of dollars of public money and have significant health impacts, yet the public interest is not at the forefront of decision-making. The public’s

concerns should be reflected at every step of the way, and not just as an afterthought," he says.

"Parliamentary inquiries not only come too late in the process, they also lack teeth if the government blatantly refuses to implement their recommendations," he adds.

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

Over 15 hectares of bush are destined to be destroyed (direct effect) to expand the Wakehurst Parkway and over 8 hectares (indirect effect) or edge effects.

This includes the removal of nearly 1.5 hectares of Duffys Forest Endangered Ecological Community-*some of the rarest vegetation on the planet*. This is listed as a SERIOUS AND IRREVERSIBLE IMPACT (page 207 of Appendix S). Please look for other ways to move people to and from the Northern Beaches – including increased Public Transport.

Clearing of forest will occur at the headwaters of steep gullies and fragile creeks that feed Manly Dam Reservoir. The EIS states that "There is the potential for impacts on aquatic biodiversity due to reduced water quality during operation due to the presence of sensitive receiving environments" (Chap 19 p 67)

Land clearing of wildlife habitat is one of the key drivers of extinction with a projected 9 out of 10 animals to be displaced from their habitats by 2050. The Beaches Tunnel project would be part of this catastrophe for nature.

*The Rocky features along the current roadside will be jack-hammered or blown up with explosives then unceremoniously *dumped into the park's bushland causing more damage. (*Appendix S p188) These rocky areas were identified as being habitat for threatened species such as the Rosenberg Goanna and the Large-eared Pied Bat. It is important to note that 46% of Australia's nationally threatened animal species can be found (have at least part of distribution) in the 0.23% of the continent that is our cities and towns. The research paper can be found here: https://nespurban.edu.au/wp-content/uploads/2019/01/lves_et_al-2015-Global_Ecology_and_Biogeography.pdf*

Drainage proposed by TfNSW for new widened road is inadequate.

Using TfNSW statistics it would have failed every month in 2020 against Terry Hills weather data – 35 mm over 5 days. Please re-design/re-investigate suitable drainage processes to protect this special area before asking for any approvals.

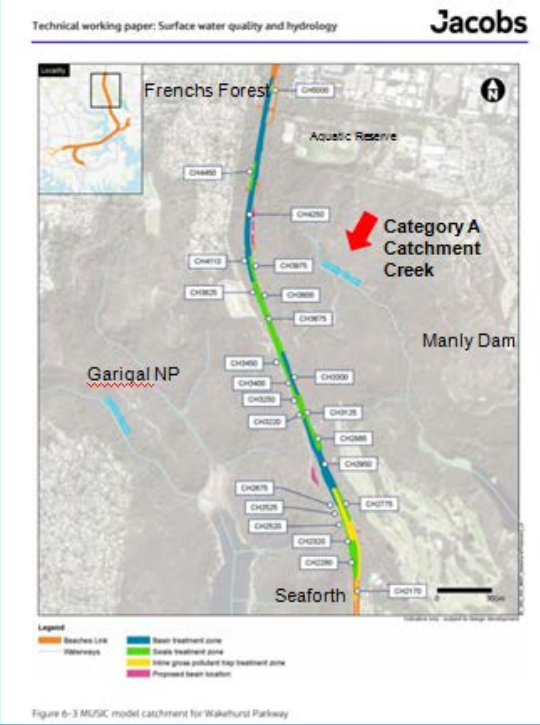
We are very concerned that proposed water quality measures will be insufficient as witnessed at Mona Vale Rd, Manly Vale PS and NB Hospital Road widening. TfNSW even state that they would not achieve water quality design targets. The swales will most likely fail at the most critical point into Curl Curl Creek (Category A creek) and drain into the catchment. Sediment impacts throughout. There is no analysis of the scouring and increased water velocity of the discharge of the constructed water quality ponds.

Appendix S page 288 says that *"construction activities could result in soil erosion, siltation, increased levels of turbidity, changed Ph levels in waterways, accidental fuel and chemical spills, contaminated run off into Manly Dam and associated creeks with increased sediment loads and nutrients"*.

Manly Creek and Manly Dam currently tick every box in regards to being a healthy aquatic ecosystem, having visual amenity and being a primary contact recreation site - yet in Chapter 17 of the EIS it is identified as being one of the waterways most at risk

from the construction - including from earthwork stockpiles. Surely this is too valuable a community asset to be put in jeopardy from a polluting road system.

The ephemeral water courses along Wakehurst Parkway are also important breeding habitats for the threatened Red Crown Toadlet. *The report states that "There is potential for indirect impacts to groundwater ecosystems"*.



Inadequate Water Quality Controls

- planning for failure above Category A Creek
- Swales will fail! (18 in green)

We can't afford to do it properly!

"The project operational water quality design targets (provided in Table 6-3) **would not be achieved** at the Wakehurst Parkway as this would require additional land acquisition, clearing of native vegetation and fencing requirements near publicly accessible areas.

It would also require higher treatment efficiency controls such as bio-filtration swales which would not be possible due to topographical constraints."

EIS Appendix O – Surface water quality & Hydrology 6.2.1.4)

The EIS states that 'temporary sediment basins would be used in catchments where the erosion hazard exceeds 150 cubic metres/year (200 tonnes/year) of soil loss'. **In essence, this is saying it is permissible to pollute waterways with up to 200T/yr. While certain guidelines may identify this as an acceptable target, the SMDCC certainly does not consider it acceptable for the receiving waters of Manly Creek and Manly Dam.**

The EIS also states that 'discharges from temporary sediment basins and construction wastewater treatment plants would be monitored and managed to ensure that the NSW WQOs continue to be met at waterways where WQOs are currently being achieved, or alternatively, where they are not being met that discharges work towards achievement of the WQOs over time.' Again, the SMDCC considers this statement, e.g. achievement over time, as completely unacceptable.

The EIS states that the 'design criteria for the sizing of temporary sediment basins should satisfy the Environment Protection Licence (EPL) for the project, and should be based on the requirements of Transport for NSW QA specifications G36 (Environmental Protection) and G38 (Soil and Water Management), and Managing Urban Stormwater – Soils and Construction, Volume 1 (Landcom, 2004) and Volume 2D (DECCW, 2008). The 85th rainfall percentile should only be applied for basins upstream of sensitive receiving environments (Manly Creek and Manly Dam). The SMDCC has significant concerns with the 85th rainfall percentile being used because in relation to hydrologic effectiveness, less than half (approximately 44%) of the average annual runoff is able to be treated - meaning a majority (approximately 56%) of runoff goes untreated.

The problem lies with traditional batch sediment basins as they are inherently unsuitable for effectively managing sediment site run-off. The SMDCC requests that site run-off treatment achieves neutral impact (NORBI?) or at the very least at least 80% treatment of the average annual runoff volume. This should be achievable through the use of high efficiency sediment (HES) basins and other complimentary erosion and sediment control measures that work on a continuous-flow basis rather than the traditional batch sediment basins process.

The EIS also states that 'the project operational water quality design targets would not be achieved at the Wakehurst Parkway as this would require additional land acquisition, clearing of native vegetation and fencing requirements near publicly accessible areas. It would also require higher treatment efficiency controls such as biofiltration swales which would not be possible due to topographical constraints'. The EIS goes on to say that the 'there are many pools along the length of Manly Creek that may assist in holding some sediment (to which nutrients would be bound)' and that 'these are unlikely to decrease the water quality of Manly Dam or Manly Creek.' **In essence this, saying that Manly Creek itself should be sacrificed to ameliorate for pollution emanating from the road operations.**

Again, the SMDCC find this statement as completely unacceptable, especially as the EIS also states that 'where the design targets cannot be met due to site constraints water quality treatment will be provided to meet or improve existing conditions to ensure that there is no impact on surface water quality as a result of the project'.

The SMDCC recommends investigation and implementation of the following water quality control options, (at a minimum) for the operational phase of proposal to ensure 'neutral or beneficial impact':

- Adequate and proven physical water control measures to attain neutral or beneficial water outcomes, e.g. bioswales as opposed to swales, biofiltration, harvesting and reuse;
- Investigate use of Wakehurst Golf Course water storage/detention basins over and above considerations made to date (including at construction stage); and
- Investigate the use of WWTPs to treat minor surface flows, in addition to Tunnel groundwater.

Previous projects by TfNSW have left irreversible damage to the environment.

We are very concerned that proposed water quality measures and construction management methods will be insufficient as witnessed at Mona Vale Rd, Manly Vale PS and NB Hospital Road widening. We know that each of these projects received many complaints and fines. We live with the irreversible damage they have created and the habitat that has been destroyed.

The EIS for this project is distancing themselves from the acknowledged impacts of the other projects in the area as referenced in Appendix S – p28/522:

"The recently completed Northern Beaches Hospital road upgrade project overlaps with northern extent of the subject land. For the purposes of the BDAR, all calculations of biodiversity impacts have been excluded from the area of overlap. The area of overlap has been heavily modified/cleared as a result of construction of the Northern Beaches Hospital road upgrade project."

The Northern Beaches Council's submission (Feb 2021) calls out many of the inadequacies of the sediment treatments proposed, the groundwater measures and

treatments, the water quality controls and inadequate research. There are substantial recommendations to be considered.

Other NSW Govt Projects construction impacts:

- NB Hospital road upgrade (Fines)
- Mona Vale Rd (14 complaints so far)
- Manly Vale Public School (Fines)

Why should we trust the EIS?

“For the purposes of the BDAR, all calculations of biodiversity impacts have been excluded from the area of overlap. The area of overlap has been heavily modified/cleared as a result of construction of the Northern Beaches Hospital road upgrade project.”

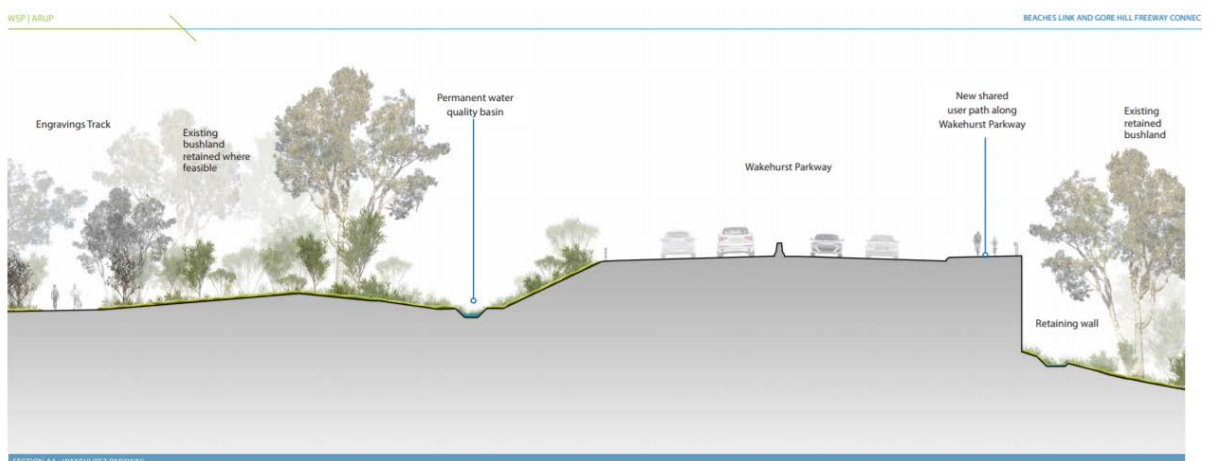
Figure 3-1 Site map (map f) EIS Appendix S

The proposed widened Wakehurst Parkway is built on a ridge.

In many cases the design includes the road being metres in the air. Please explain how the water run-off will be managed adequately, how the users of the shared pathway will be safe, and what extra damage will be caused by building on an unsuitable road? This is a cross section of Wakehurst Parkway. (Appendix v p190ish)

Please note the shared pathway (above the 6-10m retaining wall) with no safety features, no lights, no indication of separation from the 80km/hr vehicles.

The road will be visible throughout Manly Dam and the wider area. Noise from a much wider road with its construction trucks, lights from cars and street lights, and water runoff from the road will all significantly impact upon flora and fauna in the region, not to mention turn a quiet area into an unpleasant industrial highway.



In many cases the design includes the shared pathway being metres in the air and no protection from 80km/h travelling trucks. Please explain how the users (cyclists, pedestrians) of the shared pathway will be protected adequately?

The gap between the two parks is currently around 12m to 15m in the southern section this will increase to **40** metres as the road is widened and realigned. This is massive infrastructure in a recognised sensitive environment.

Could TfNSW provide further information regarding alternative alignments from Seaforth which are less destructive to biodiversity in MWWMS? For example, could the alignment be further to the West where impacts from Mountain Bikes tracks and alike are already present?

The Wakehurst Parkway is currently unlit.

This proposal is pretty opaque about whether there will be any lighting provided. How will you cater for the needs of the nocturnal, diurnal animals & insects as well as the safety of the shared users. Please be upfront about what you are planning for this new 40m wide road?

Streetlights all along an elevated, four-lane Wakehurst Parkway will also markedly impact on how Manly Dam's Reserve looks at night, causing a significant upscaling in light pollution. It's currently a secluded area for nocturnal wildlife with minimal light pollution (at least by Sydney standards). Viewed from (for example) Allambie Hts, bright lights will be visible along the entire top ridge and will very much urbanise the appearance of the Reserve.

Manly Dam is one of the last sizable refuges for nocturnal wildlife away from noise, light and other human disturbance. In the last decade or so new light installations such as at Allambie Oval and/or Tennis Courts and at Wakehurst Tennis Courts have vastly increased lighting which beams out of the surrounding darkness and already spoils the 'wild' amenity to some extent. (Previously only the water towers had modest lighting).

From Appendix Y - B4 Design and operation - Noise, vibration and light impacts –
“Artificial light impacts on native fauna in the operational phase of the project will be minimised where feasible and reasonable through further design development, where the project adjoins tracts of fauna habitat (e.g. along the Wakehurst Parkway) consistent with the requirements of Australian Standards and Guidelines 4282 – 2019 Control of the obtrusive effects of outdoor lighting.”

Please fully articulate what is planned for preparation, construction and operation of the proposed road widening and the shared path. Leaving this important area until Detailed Design is unacceptable. The concept of “where feasible and reasonable” is also unacceptable and needs full community consultation.

New wildlife crossings are planned for the finished product of widened road.

Fauna fences are proposed for construction. Please explain how this wildlife corridor will operate for the 5 years of construction and animals will be able to reach fresh water of Manly Dam? What is the construction material of the fencing?

This realignment and upgrade would increase habitat fragmentation which could create a further barrier to fauna movement between habitat to the east and west of the Wakehurst Parkway. This is identified as a Prescribed impact on habitat connectivity,

the movement of threatened species and vehicle strike. We are concerned that this impact could be critical (Smith & Smith 2005) to some fauna populations.

Northern Beaches Council are requesting investigation into an overpass or land-bridge. We would support this request - as we did at a Council Resolution of a NBC meeting in 2019.

The Dive site at Seaforth (BL13) will be on the hill above Wakehurst Golf Course will be a tunnel digging operation 24x7 for approximately 5 years.

How will you ensure the drainage from this site does not impact Manly Dam below?

The EIS states that a secondary treatment plant will be located at the Wakehurst Parkway tunnelling site (BL13) and will discharge treated water at a rate of 10m³ per day to a new channel filling the Wakehurst Golf Course Dam (for re-use) for estimated 4 years. Run-off is VERY likely to stream down onto Wakehurst Golf Course.

Wakehurst Parkway south (BL12), Wakehurst Parkway east (BL13) and Wakehurst Parkway north (BL14) construction support sites have a “high risk of dust settlement, human health and ecological impacts as a result of earthworks, construction and track-out activities”. (Chap 12 p22)

In 2018 Sydney Water Commissioned a Biodiversity Assessment of this 1.65-hectare area. The site is habitat for a wide range of species, including five (5) threatened species. A total of twenty-nine (28) native fauna species were detected during the current survey. Five (5) threatened fauna were detected and potentially detected in this survey. (*The Eastern Bent-winged bat, listed in the above assessment, was not even identified in the Beaches Tunnel EIS which casts doubt on its reporting standards).

Appendix S page 187 states that “Impact to sensitive areas have been minimised by optimising the location and layout of temporary construction support sites”. The polar opposite is happening here in an area which has the most biodiversity to lose !! A channel will even be formed at the eastern edge of this site impacting more bushland and directing drainage water down towards a golf course dam. This area is at an elevation of 100m above sea-level, so there would be nothing to stop a flow of earthwork siltation and sediment flowing downhill during heavy rain events.

We support the Northern Beaches Council submission where they state that if this proposal goes ahead, that the Wakehurst Parkway East site (BL13) must be wholly contained within the approved site and have NO ENCUMBERANCE on Manly Warringah War Memorial State Park.

We do not support that “temporary drainage works” might extend beyond the footprint of the project. This has not been done well by any other NSW Government project in our area and we do not want to risk the water quality of Manly Dam.

We support NBC request that all hardstand areas proposed for the BL13 site in the area are to be demolished and removed from site and suitable growing media brought in to support natural surfaces and regenerated to suitable natural bush – including at least a 3 year maintenance plan.

All sediment controls and site management MUST include liaison with staff from Northern Beaches Council in a regular Working Group, with regular site inspections and public information available.

PLEASE RECONSIDER A LESS DESTRUCTIVE ALTERNATIVE.

The Dive site at Seaforth will be handed back to MWWMSF yet again!

SMDCC was a major part of the community group who saved this land from being sold for housing in 2015. SMDCC was part of the community who were promised this parcel of land back to Manly Dam in 2017 by Mike Baird.

SMDCC is now very concerned that the 2018 Biodiversity Study done by Sydney Water will be ignored and this land will be the BL13 for the Beaches Link Tunnel.

How is this considered compensation for the destruction of this site and surrounds when Mike Baird had already promised this land to the Park in 2017?

What guarantees are there that in 2028 or so that this land will ever be returned to Manly Dam?

Manly Dam CATCHMENT should be protected.

The Manly Dam wall was built in 1892 to provide a water supply for the small settlement of Manly. To safeguard the newly created reservoir from pollution, its surrounding water catchment was consequently strictly protected. Our society inherited a pristine bushland sanctuary, rich in Aboriginal heritage and glorious enough to be declared a War Memorial Park to honour our veterans (circa 1920). Manly Warringah War Memorial Park holds particular significance in remembering fallen service personnel from the First and Second World Wars, as well as being of significance to past and present-day members of the Defence forces. It is the only war memorial to be created by conserving natural bushland.

Northern Beaches Council is currently nominating the park for National Heritage listing, such are its heritage and environmental values. It was gazetted as a "State Park" on 7th April 2017 to provide it with a higher level of protection (ironic!).

Manly Dam Reservoir is the last unpolluted lake in Sydney where it is still safe to swim. Its catchment is especially sensitive because it exists within an urban environment and its waterways are already under stress from encroachment.

The water management plans outlined in the EIS are inadequate for the protection of fresh water in Manly Dam. The water quality is already at a tipping point with run-off from the Golf Course requiring a propeller to be installed to keep the blue-green algae under control. Regular water testing also occurs. In times a heavy rainfall the dam is closed for swimming due to the CURRENT levels of runoff. How do you propose to protect Manly Dam from the huge levels of sediment, runoff during construction and then during ongoing operation.

Please revisit your calculations and come up with a better plan. This is an environmentally sensitive area and needs the protect it deserves as a State Park and a War Memorial Park and one of the last freshwater swimming places in Sydney.

Edge effects on the Wakehurst Parkway and loss of trees.

The entire project would involve the estimated loss of 3,500 plus trees well over 2,000 of these would be along this stretch of road-including many rare and ancient species. Earth moving and excavation would also degrade up to another 50 metres of bushland adjoining the road through "edge effect" ... negative impacts which include opening up the parks to weed invasions and pathogens.

The EIS alludes to this impact but in no way identifies the seriousness of the effect on the environment. Please identify openly the edge effects expected from this project. It is important to note that 46% of Australia's nationally threatened animal species can be found (have at least part of distribution) in the 0.23% of the continent that is our cities and towns. The research paper can be found here: https://nespurban.edu.au/wp-content/uploads/2019/01/Ives_et_al-2015-Global_Ecology_and_Biogeography.pdf

Freshwater Aquatic Biodiversity Impacts

Both Manly Creek (aka Curl Curl Creek) and Manly Dam are identified as 'sensitive environments' (e.g. A-Grade Creek in Council's Creek Management Study, Type 1, Class 1 – highly sensitive fish habitat). However, while some mitigation measures are identified, several statements and responses outlined in the EIS are unacceptable in relation to protection of aquatic biodiversity and water quality.

Due to the sensitive nature of the downstream waterway, including habitat for known threatened species, e.g. *Galaxias brevipinnis*, the SMDCC consider that anything less than 'Neutral or Beneficial Impact' on water quality is unacceptable, during both the construction and operational phases.

It should be noted that the operational water quality design targets (Table 17-4, Chap 17) identify 'neutral or beneficial impact' for water quality.

Run off contaminants:

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.

A long term study of a mass die off of salmon in urban streams in Washington State found that storm water contaminated by micro particles 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>)

An unfiltered Ventilation stack of 25m height will be installed along the Wakehurst Parkway at the tunnel entrance near Kirkwood street.

This is just after the steepest section of the tunnel and will include emissions from trucks/freight as they move into lower gears climbing the hill and produce more emissions. Even though cars might move to electric – will trucks be also move to electric or are we stuck with this?

A ventilation outlet along Wakehurst Parkway will produce emissions so great that it will even “have the potential to effect prescribed airspace”. There would be increases in the PM2.5 concentration along Wakehurst Parkway and a large increase in traffic (about 140 per cent) as a result of the project.

However, the section of Wakehurst Parkway that is affected crosses bushland, so all the toxic air quality would be released in to the very area that people go to for bush walks, biking and leisure activity. This is an area that comprises Sydney's so called “Green Lungs” and was a Covid haven for so many during 2020 – which has increased it's usage for recreation today.

The unfiltered stack will be on a ridgetop above a natural basin which the bad air quality (complete with a range of toxins) will settle into.

Please consider filtering the stacks at Wakehurst Parkway.

<https://www.theguardian.com/commentisfree/2021/jun/10/as-nsw-roads-minister-i-know-we-have-to-incentivise-electric-cars?fbclid=IwAR2gO1D9k11D2MbCMmQwpkLDG1iTBQxJqe6UhqqMnk7uEV06MJrYpoygZnw>

“As anyone who has spent time in Sydney knows, we repeatedly see smoke and fog settling in over the basin. That mix contains a toxic cocktail of nitrous oxides and diesel particulates, which everyone is breathing in. Even those who are climate change sceptics cannot deny that it is bad for our health and that things must change.”

Andrew Constance 11-6-2021

<https://www.smh.com.au/national/nsw/minister-wants-electrification-of-all-nsw-vehicles-to-overcome-health-concerns-20210609-p57zl4.html?fbclid=IwAR1C-vSvJggs-iwMu5wnhiF-uZaTUbyCLh68n8xg5dQCzqAYSYLjlmGRCT8>

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.

Impacts to Burnt Bridge Creek – flows reduced by 96% and groundwater down by 6 metres!

Building a road through Balgowlah Golf Course and degrading that environment, threatening a colony of Grey Headed Flying Foxes and realigning Burnt Bridge Creek. Maximum flows of Burnt Bridge Creek would be reduced by 96% after 100 years of operation (Chap 17 p57).

Burnt Bridge Creek will effectively end as a naturally flowing creek. Water flowing down the creek will be drained (flow reduced 96%) and underground water pumped out to a depth of 11m. This is necessary to stop water dripping into the tunnel.

The creek and area around it will be dried out and incapable of supporting tall leafy trees and riparian bushland. The creek through the golf course will be turned into a cement stormwater drain, wider than the current creek and deeper into the ground. This is to remove water more quickly to keep the land dry and prevent water entering the tunnel. This will kill trees and water-loving plants.

The quick discharge of water into Manly Creek will increase sediment and send road runoff into the creek without the current filtering process, lowering water quality in Manly Creek and out to Queenscliff beach. Instead of a creek, we will have a cement stormwater drain.

Dredging Middle Harbour and the sediment impacts:

A section of Middle Harbour would be dredged and 6 barge loads of material a day would be dumped at sea (Chap 1 p 12). This will involve the disturbance of toxic sludge.

The technology used to build the pylons is ancient. Modern technology would build the supports offsite and require only a few days to weeks to put in place, causing less impact on the environment, on traffic and the lives of people in the area.

There is also a huge environmental impact on marine life in the Middle Harbour area including the Spit, Clontarf, Beauty Point and Sailors Bay. The construction of two cofferdams and the laying of two immersed tunnel tubes are likely to pose significant risk by disturbing the highly sensitive ecological interaction of marine life. The disturbance of sediment and more turbidity will spread accumulated toxins and affect the seagrass and the microscopic organisms within which will threaten the survival of larger animals such as the White's seahorse, several fish species and consequently the Little Penguins (*Eudyptula Minor*).

The endangered Little Penguins (*Eudyptula Minor*) feed on small organisms, which only exist within sea grassed areas of the harbour, for the period of feeding their chicks and larger species for adults. Because of the increasingly busy, noisy and boat-trafficky location, translocation was addressed, however, it was not possible, even though comfortable nesting boxes were installed at more secluded beaches, these penguins came back every year to nest under Manly Wharf.

Sadly, apart from dog predation, it was noticed that excessive noise was impacting negatively on the breeding results, as well as the introduction of fast ferries which caused increased turbidity and, when turning around over the seagrass patches, contributed to diminishing foraging areas.

There are now no more penguins left at the Manly Wharf Habitat which is a great shame since it was a perfect location for informing the public as well as educating the students at local primary and high schools (Taronga Zoo's Project Penguin).

Even though all the nesting is located within the protected bays of Manly, the penguins travel all over the harbour for foraging. Many sightings have been reported from the Middle Harbour areas as well as Northbridge. We are deeply concerned that all the disturbance through dredging the sea beds as well as construction side effect such as potential fuel leaks and under-water noise will kill the seagrass patches and with it the foraging opportunities of our last remaining Penguin Colony.

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

<https://www.theguardian.com/commentisfree/2021/jun/10/as-nsw-roads-minister-i-know-we-have-to-incentivise-electric-cars?fbclid=IwAR2gO1D9k11D2MbCMmQwpkLDG1iTBQxJqe6UhqqMnk7uEV06MJrYpoygZnw>

"As anyone who has spent time in Sydney knows, we repeatedly see smoke and fog settling in over the basin. That mix contains a toxic cocktail of nitrous oxides and diesel particulates, which everyone is breathing in. Even those who are climate change sceptics cannot deny that it is bad for our health and that things must change."

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<https://www.smh.com.au/national/nsw/minister-wants-electrification-of-all-nsw-vehicles-to-overcome-health-concerns-20210609-p57zl4.html?fbclid=IwAR1C-vSvJggs-iwMu5wnhiF-uZaTUbyCLh68n8xg5dQCzqAYSYLjlmGRCT8>

"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.

The research conducted by academics from the universities of Sydney and NSW, published on Wednesday in Public Health Research and Practice, found concerns over long-term public health impacts for major projects were often ignored, or considered too late.

Senior author Patrick Harris from the Centre for Health Equity Training, Research and Evaluation at UNSW said public interest should be front and centre of the government's mammoth infrastructure pipeline, particularly during the current infrastructure boom.

"These projects will cost billions of dollars of public money and have significant health impacts, yet the public interest is not at the forefront of decision-making," Dr Harris, who is also the NSW branch president of the Public Health Association of Australia, said.

Dr Harris pointed to the 2018 parliamentary inquiry into WestConnex as an example of the problem, where two-thirds of public submissions raised concerns with air quality and mental health. He said the inquiry process was conducted too late to make any substantive difference to the \$16.8 billion project.

“Western Harbour Tunnel is another instance where the health impacts were considered very late in the EIS, rather than upfront in the business case,” he said.”

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

Manly Warringah War Memorial State Park

Manly Dam’s catchment was protected in the 1880’s to conserve the quality of water and later the area was designated as Australia’s only War Memorial to be created by conserving natural bushland.

It is now the last freshwater lake in Sydney where you can still swim in unpolluted water. The water ultimately flows to Manly’s iconic surfing beaches.

The park is so special that Northern Beaches Council is currently nominating it for National Heritage listing. Its Aboriginal heritage is precious - as is its ecological richness.

(m) any other related matter.

PRECAUTIONARY PRINCIPLE?

This is just one of a series of cases in the report where the Precautionary principle has not been adopted and there seems to be a “she’ll be right” mentality.

Premier Gladys Berejiklian is a firm advocate of the precautionary principle when addressing the Covid 19 scenario. Sadly, in environmental considerations (including this EIS) it seems to be sadly lacking.

ABORIGINAL HERITAGE

The proposed new road will be 50m from this important aboriginal site. Damage from tunnelling, blasting and general clearing is highly possible. The remaining site will be more exposed after completion.

The Bantry Bay Aboriginal Engraving site is highly significant. EIS Chap 15 p 25 says *“There is the potential for changes to the visual setting and the surrounding landscape due to tree removal. A huge new road will encroach into the site’s ambience. Yet the risk of impact is described as “negligible”.*

The Northern Beaches Council submission also provides further information regarding the aboriginal sites in this area which have been omitted in the EIS.

We are happy to have our organisation name published and are happy to be called as witnesses.

Yours Sincerely,

Ann Collins & Malcolm Fisher
Save Manly Dam Catchment Committee