

Sub no	Option selected	Verbatim comments – environment - biodiversity
		know, the ecological communities that will be impacted by the described proposals - i.e. Swamp Sclerophyll Wetlands, Freshwater Wetlands, Swamp Oak Floodplains, and Coastal Saltmarsh - are threatened communities. Please recognise that the exposure of contaminated sediments, the building of embankments to obstruct and redirect water courses, and extensive land clearing will impact these precious local ecosystems in ways that cannot be holistically understood.
S48	O1	* The loss of biodiversity will impact for decades. Where will the wildlife that live here be relocated.
S50	O1	* We think the environmental value of the Parkway, its rich biodiversity of endemic flora and fauna and endangered ecological communities is far more valuable than the protection from flooding. * All the proposals involve serious environmental disturbance including removal of large areas of bushland (over 2.5 hectares). Removal of the top soil in which the bushland is growing, would make ecosystem regeneration most difficult and the habitat loss for the time of construction and restoration works would stretch into many years. Some of the proposed removals are of threatened ecological communities so these proposals are absolutely not acceptable.
S56	O1	* ALL the given proposals involve serious environmental disturbance including a) removal of large areas of bushland and
S58 / S208	O1	* However, I am even more supportive of the environmental value of the Parkway as a wonderful belt of green from Clontarf to Narrabeen, even though weed infested. Therefore I would only support Option 2 at the most and any work carried out would need to minimise effects on threatened ecological communities.
S60	O1	* The Wakehurst is an incredibly valuable rich, sandy soil ecosystem and due to this and other geological considerations, it floods and it should flood!
S62	O1	* ALL the given proposals involve serious environmental disturbance including a) removal of large areas of bushland
S63	O1	* Many native endangered plants and our most unique wild life call this place home. This magnificent area should not be spoiled for 6 days of inconvenience. * Yes I use the parkway most days.
S64	O1	* ALL the given proposals involve serious environmental disturbance including a) removal of large areas of bushland and
S65	O1	* I am also concerned any flood mitigation works will impact on the environment to the detriment of flora and fauna.
S66	O1	* I'd also suggest that the new part of road have best standards for roadkill prevention including fencing, underpasses and overpasses for animals.
S68	O1	* Furthermore any solution must address the environmental impact on protected bushland, wildlife corridors and animal habitat.
S69	O1	* Why don't you simply elevate the road in the required sections. Doesn't upset wildlife and minimal damage to flora.
S73	O1	* The inconvenience of the parkway closing 6-7 times per year is very minor compared to the loss of wildlife, natural habitats, and Indigenous land lost due to the upgrades. I'd rather we spend \$17.5 million in taxpayer money on safeguarding these things.

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S74	O1	<p>* Loss of biodiversity must be valued ahead of more damage to bushland. I am pleased that the options are being presented to residents. However, more publicity is needed over the rights of residents to influence the expenditure of their rates on environmentally important issues.</p> <p>* No government should have the rights to damage ecosystems on any scale and Northern Beaches Council should also be taken to task for allowing the disastrous destruction witnessed on Mona Vale Rd. Ecocide is now enshrined in International law and citizens have the ability to challenge idiotic counselors and governments decisions over matters that will have generational impacts.</p>
S76	O1	<p>* It's not right for our native flora and fauna and ecosystems Please leave it be I can imagine the road will be closed much longer from making these 'non flooding' options which may not even work then the once in a while flooding closures anyway</p>
S83	O1	<p>* The primary issue I have is that the removal of material, which is going to adversely affect protected fauna is at best a temporary solution as within a few years it will return.</p>
S86	O1	<p>* The existing ecosystem should not be damaged/changed to limit naturally occurring flooding.</p>
S93	O1	<p>* The number of closures per year, which is very low, does not justify the environmental damage to native fauna and flora.</p>
S94	O1	<p>* We cannot afford any further clearing of flora and fauna. Many species are endangered and need the habitat. This proposal would have flow on effects for the species in the Narrabeen lake, which I think we would all agree needs to be kept healthy.</p>
S95	O1	<p>* The environmental impacts on plants and wildlife and the cost of all the projects are definitely not justified by having the road open on more days per year. The number of days the road is closed per year is so small that it is outrageous to think killing all those trees and affecting the wildlifes home is worth it for a few easier road trips.</p>
S96	O1	<p>* The level of vegetation clearance is not justified by the options presented.</p>
S97	O1	<p>* We just cannot have any more damage done to the flora and fauna in this unique area and the permanent erasure of certain plant species and aqua animals, when it has already undergone much destruction during the NB hospital build which it will never recover from.</p>
S99	O1	<p>* The rare times the Parkway is closed due to flooding is not worth destroying over 1,000 trees let alone the damage to our precious wildlife.</p>
S103	O1	<p>* The destruction of native species of fauna and flora is just not justified when flooding still may occur. Look at heartbreaking destruction wrought on the area due to the Mona Vale Rd widening.</p>
S104	O1	<p>* Doesn't really seem much point as the road is sure to be widened in the future impacting native flora and fauna anyway.</p>
S110	O1	<p>* The upgrade must be sensitive to the natural environment, ecosystems and habitats of endemic flora and fauna located throughout the corridor as well as Narrabeen Lagoon. * The removal of exotic weed species and restoration of local vegetation communities needs to be executed in respect of the existing native environment that exists today.</p>
S112	O1	<p>* As a resident of the beautiful Northern Beaches area, I regard the natural environment as most important and would be devastated to know that for flood proofing there would be habitat loss and disturbances for our wild life.</p>

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S121	O1	* We have had so much destruction across the country that we have to step back and look at the long term impacts on our native flora and fauna.
S128	O1	* Option 1 or option 2, we need to minimise the damage to our natural environment. I would like to see more emphasis on protecting our native flora and fauna
S138	O1	Do nothing!! The key words are endangered species and temporary solution for millions of dollars
S140	O1	The bush next to the Parkway is an environmental sensitive area with lots of endangered flora and fauna species.
S141	O1	* The thought of tearing through the bush and upsetting the native flora and fauna in such a beautiful area is terrifying. Looking at the destruction on Mona Vale Rd should be a warning to us all. Progress is necessary but sometimes we must take a step back and work hard to preserve what is the most precious part of our area. As a longtime Wires rescuer and carer I'm painfully aware of the serious pressure our wildlife is under. We need to learn to show nature some respect.
S145	O1	ALL the given proposals involve serious environmental disturbance including a) removal of large areas of bushland and
S146	O1	* Not necessary to destroy natural vegetation and natural habitats just because some idiots put a hospital in Frenchs Forest.
S150	O1	* Destroying habitats isn't the answer.
S153	O1	* There is no mention of environmental protection for our native bushland or native species in your options. It is World Environment Week and the United Nations is imploring the world to MAKE PEACE WITH NATURE.
S155	O1	*With regard to the Parkway Flood Mitigation and plans to destroy and deplete 34,700m2 of local and native vegetation is reprehensible, dangerous and extremely short sighted. Please view your own policy on native vegetation intentional destruction: "Australia's native vegetation is one of the richest and most fundamental elements of our natural heritage. Native vegetation binds and nourishes our ancient soils; shelters and sustains wildlife; protects streams, wetlands, estuaries, and coastlines; absorbs carbon dioxide and emits oxygen. Depletion and destruction of native vegetation is a primary driver of land degradation, salinity and declining water quality, and is the biggest cause of biodiversity loss. While broad scale land clearing for agriculture and urban development is a critical threat... National and Australian Government policies and activities, developed and implemented by the Department, which encourage and support the sustainable management of Australia's native vegetation. The 2012 NVF was developed to maintain or build healthier and more connected native vegetation. The framework is a strategic document with five goals to guide government, the community and the private sector in vegetation management across Australia. The five goals are: 1. Increase the national extent and connectivity of native vegetation 2. Maintain and improve the condition and function of native vegetation 3. Maximise the native vegetation benefits of ecosystem service markets 4. Build capacity to understand, value and manage native vegetation 5. Advance the engagement and inclusion of Indigenous peoples in management of native vegetation https://www.environment.gov.au/land/native-vegetation The Northern Beaches Council also states that there are potentially Fifteen threatened fauna species which are likely to be adversely affected by this

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		proposed flood mitigation. They also state “Council is committed to exploring ways to ensure the local and unique ecological character of the Middle Creek catchment and the Parkway area is appropriately rehabilitated and maintained into the future.” which we find hard to believe given the dire consequences of this plan. You cannot rehabilitate old growth native forest. Planting new vegetation will not mitigate the loss of biodiversity.
S156	O1	* The potential environmental impacts are not worth it. The table discusses impact of construction (short term), but does not address long term impacts of further altering natural water flows and land clearing. Any options proposed and considered by Council should result in enhancement of the local environment, not what our tolerance is for further degradation. Land clearing and dredging in particular are so destructive that the natural ecosystems will not recover in a reasonable time frame, and puts undue pressure on an already restricted ecosystem in the middle of Sydney's urban environment.
S157	O1	* ALL the given proposals involve serious environmental disturbance including a) removal of large areas of bushland
S161	O1	* Especially when the proposals have such a huge environmental impact on threatened native plant and wild life. I didn't see anything in the proposals around how the native wildlife, plants and aquatic life would be regenerated and encourages back after the work has been completed. This has too big of an environmental impact.
S163	O1	* I chose this opinion since even the minimal impact option still require a huge destruction of native vegetation and impact to threatened species and ecosystems.
S166	O1	* The bushland in this area is already heavily fragmented and limited in its ability to provide protection and habitat for native flora and fauna. We already have so little healthy bushland and an increasing amount of threatened plant species. The impacts of the clearing for extra drainage do not outweigh the costs.
S181	O1	* I would also prefer not to lose any of the endangered Species of plants.
S185	O1	* Retain and protect the natural environment of The Parkway to preserve habitats for local Flora and Wildlife. Don't destroy remaining native areas in the name of progress - once it's gone it cannot be replaced.
S188	O1	* O2 & S1 look reasonable, B7 looks like a good option by providing the best drainage to let water pass the obstruction of the road while minimising impact on native vegetation, the minimal disturbance will be much easier to sell.
S191	O1	* The options seem to all have vast vegetation clearances impacting fauna as well. * Bridge the road and fix it properly for local residents, the fauna and flora of the area. A bridge would allow the ecosystem of middle creek to be maintained. It is the best option.
S193	O1	* Road closures are not as important as preserving local habitats and threatened swamp trees.
S194	O1	* All options require the removal of a lot of native vegetation and risk to the endangered flora and fauna and its hard to support, however, if there is no other alternative and work is to go ahead I be in favour of Option B1.
S197	O1	* I am in favour of not disturbing the current area so that the native fauna and flora are preserved.
S202	O1	* Enough clearing of habitat.

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S203	O1	<p>* SERIOUS ENVIRONMENTAL DEGRADATION</p> <p>We are concerned that all the options described in this proposal will inflict irreparable damage on the ecosystems in and around Narrabeen Lagoon, with far-reaching and unpredictable ecological ramifications. We are primarily concerned that:</p> <ul style="list-style-type: none"> -The biodiversity of the area will be affected. The proposals will impact the threatened ecological communities of Swamp Sclerophyll Wetlands, Freshwater Wetlands, Swamp Oak Floodplains, and Coastal Saltmarsh, which are some of the most biodiverse ecosystems in Greater Sydney. They provide habitat for nationally threatened species including the Giant Burrowing Frog, as well as numerous NSW threatened species including Powerful Owl, Greater Sooty Owl, Barking Owl, Red-crowned Toadlet, Black Bittern, Glossy Black-Cockatoo, Squirrel Glider, Grey-headed FlyingFox, Eastern Bentwing-bat (all confirmed in the area), as well as Southern Brown Bandicoot, Koala, Spot-tailed Quoll, Swift Parrot, Masked Owl, and Australian Little Bittern (unconfirmed occurrence). - The clearing of bushland will involve the cutting down of trees that not only have significant ecological value, but also cultural value to the Northern Beaches community. Some of the species in this area are locally significant (Bangalay, Swamp Mahogany) and/or threatened. - The obstruction and redirection of water courses will alter habitats and ecologies in ways that are both irreversible and unable to be holistically understood or pre-empted.
S205	O1	<p>*Cost /Benefit</p> <p>The cumulative time during which The Parkway is closed due to (say, 7) flood events is around 36 hours per year. This is only 1.5 days out of 365 days – a small fraction of the year. By comparison, the adverse impacts on the environment will affect biodiversity, wildlife, waterways and the flood plain ecology for every day of the year and potentially for many years to come.</p> <p>*Also, the financial cost of the Flood Mitigation Options is quantified, but the cost to the environment is incalculable and based on the value assigned to biodiversity.</p> <p>* The existing floodplain has high conservation values for biodiversity, native flora and fauna.</p>
S519	O1	<p>The Australian Plant Society Northern Beaches Group is actively involved in the protection, propagation and promotion of our endemic flora and Australian flora where appropriate.</p> <p>The Parkway, that lovely road through the bush to the top of the Northern Beaches is to all of us very familiar and the flooding of it is equally well known. The richness of flora species along the parkway, indicates several different ecological communities with some of them known as endangered.</p> <p>The flood prone area as such is equally rather uncommon as most of our natural swap lands have been filled in, mostly by being used as a tip.</p> <p>We strongly oppose the clearing of over 2.5 ha of native vegetation to remove the sediment to increase the faster drainage within the lower Middle Creek basin.</p> <p>We recognise the inconvenience of the occasional flooding of the road but the protection of our environment especially within such a biodiverse location deserves clearly priority.</p> <p>We hope further that the upgraded Mona Vale road will provide quick and easy alternative access to Northern Beaches Hospital and that the Parkway does not have to be relied on at times of flooding.</p> <p>For these reasons we favour the 'Do Nothing' option.</p>

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S521	O1	<p>* The National Parks Association, Sydney Region Branch does not support application of mitigation activity for the Parkway. There appears to be limited benefit for the proposed work with potential significant impact to ecological values of the area.</p> <p>* Options 2 through 5 require clearing vegetation which increasing deliver impacts to threatened plant species from two to four plant community types, noted as Swamp, Sclerophyll Forest, Freshwater Wetlands, Swamp Oak Floodplain forests, and Coastal Saltmarsh.</p>
S530	O1	<p>* also am very much opposed to loss of bushland as I feel bushland is under assault right across the northern beaches.</p>
S531	O1	<p>* The options B5, B2+01, B3+01 and B3+02+S1 will not solve the flooding issue but will cause serious damage to Narrabeen Lagoon and its catchment. With the widening of Mona Vale Road and The Parkway there has been an enormous amount of clearing of native vegetation and loss of habitat in Pittwater. In NSW our biodiversity is in crisis.</p> <p>Each Council area needs to protect and preserve its local biodiversity. The proposals will impact Swamp Sclerophyll Wetlands (Endangered Ecological Community), Freshwater Wetlands (Threatened Ecological Community), Swamp Oak Floodplains (Threatened Ecological Community) and Coastal Saltmarsh (Endangered Ecological Community) plus 15 threatened native fauna – nationally threatened species, the Giant Burrowing Frog and NSW threatened species Powerful Owl, Great Sooty Owl, Barking Owl, Red-Crowned Toadlet, Black Bittern, Glossy Black-Cockatoo, Squirrel Glider, Grey-headed Flying-Fox, Eastern Bentwing-bat (all confirmed in the area) and Southern Brown Bandicoot, Koala, Spot-tailed Quoll, Swift Parrot, Masked Owl and the Australian Little Bittern (unconfirmed occurrence).</p> <p>Deep Creek Reserve is located along The Parkway, and is one of the Northern Beaches highest conservation reserves contributing to a regional corridor for an abundance of native animals.</p> <p>Impact on water courses being obstructed and redirected will alter habitats and ecologies irreversibly and are not really understood.</p>
S532	O1	<p>* The waterway flows naturally to Narrabeen Lagoon and changing this flow to accommodate a road that was badly designed in the first place demonstrates poor analysis and lazy decision making.</p>
S207	O2	<p>* I chose this option on the basis that there was the lowest impact on ecosystems in the area.</p>
S209	O2	<p>* Endangered species must be by far the top priority in any work done in this beautiful area of Sydney</p>
S217	O3	<p>* I am concerned that at least 27 hectares of vegetation will be cleared which risks fundamentally changing the character of the Parkway which is very much part of what makes the Northern Beaches a special place.</p> <p>I appreciate there would be a plan to revegetate, but I fear it will not be the same and the cost of gaining a few days a year when the road does not flood will be too high in terms of amenity and the permanent damage that will be done to threatened ecological communities.</p> <p>So, not "do nothing", but we must tread as lightly as possible on our unique environment.</p>

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S218 / S529	O3	<p>* I believe any changes to the Parkway needs to have suitable protection for native wild animals and bush land. This would either include underpasses or overpasses for native animals to cross the parkway and avoid car accidents and protect wildlife.</p> <p>There would need to be fences as well to avoid the mentioned accidents. There need be more than two or three protected crossings. One isn't enough.</p> <p>In addition any lost habitat will need be replaced in another location. Maybe extend current protected areas as enough land has been lost due to development.</p> <p>If none of these suggestions are included I'm against any further development on the Parkway as enough bush land on the northern beaches has been lost or is under threat due to Northern Beaches tunnel or residential development.</p>
S219	O3	<p>* I am also VERY CONCERNED WITH ANY LOSS OF TREES, or other changes to the environment in this precious area, and I would like to know, and be reassured about any environmental loss and impacts all of these options.</p>
S222	O3	<p>* Excavation</p> <p>I oppose the excavation of the sediment, from Oxford Falls Road down to Middle Creek. The only method used to achieve this would be destructive to the existing environment which would have an immediate impact on the native species of "flora & fauna". This corridor is a breeding ground for 15 species of native wildlife some of which are already on the endangered list, deeming this far too precious an area to damage.</p>
S226	O3	<p>* I also believe that it would be a crying shame to remove all the vegetation to no practicable end. Bearing in mind all the natural habitats and ecosystems that would be gone forever.</p>
S227	O3	<p>* The local wild life need the environment left as is with some under the road pipes to allow water to drain away, these could also be use to allow wildlife to cross under this very busy road instead of being decimated by fast moving traffic.</p>
S228	O3	<p>* Ecological significance is important.</p>
S232	O3	<p>* Option 3 (B2) in my opinion is the better solution for the Parkway ; it has less impact on the surrounding area so long as there is not large scale tree clearing to facilitate the work. Upgrading the culverts or better still adding new ones would enable wildlife to cross this very busy road.</p>
S244	O4	<p>* Try to minimise the impacts on the trees, wetlands and any wildlife.</p>
S251	O4	<p>* We need the option that has the minimum effect on the local environment. Trees and native flora and fauna need to be considered.</p>
S255	O5	<p>* Although not well explained, excavation of existing vegetation areas to allow for a basin or basins to capture floodwater is seriously damaging to the existing environment. If this option is chosen, the fill required to raise the road level must be taken from the roadworks on Mana Vale Road and consideration should be given to the use of prefabricated culvert walls. There should not be any excavation of the Parkway area for landfill to limit the incursion on the existing environment.</p>
S258	O5	<p>* All the given proposals involve serious environmental disturbance including removal of large areas of bushland (over 2 hectares). Removal of the top soil in which the bushland is growing, makes revegetation more artificial and difficult to replicate whole ecosystems. Some of the proposed removals are of threatened ecological communities so these proposals are even more worrying.</p> <p>* If the road were elevated by bridges, animals could move through underneath. The road design proposal needs to allow for animals to move safely from one area of bushland to another and preserve habitat.</p>

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S287	O5	* As I understand it the creek water flow is trying to follow the original over land flow path i.e. the original creek prior to retraining when the Parkway was originally constructed decades ago. Regardless of the solution the spoil berm built up by years of inundation and flooding needs to be removed anyway. The removal of this material will impact the immediately proximate flora and fauna so the challenge is trying to limit this disturbance. There would be no easy less intrusive alternative.
S350	O5	* I'd like to make sure this won't damage the local ecology, flora & fauna or any areas of Indigenous significance, but otherwise give it my full support.
S376	O5	* While the impact to threatened species is undesirable, it is best to do this once and do it properly.
S382	O5	* Further research is required to provide habits for the endangered flora and fauna. It is a unique and beautiful area - not only providing a cleaner environment by offsetting the car emissions but also providing homes for a diverse range of flora and fauna that must be preserved.
S387	O5	* However we need to take care of native flora and fauna in the area and make every effort to protect local indigenous heritage sites too.
S394	O5	* There is not indication of animal safety. This must be taken into consideration.
S401	O5	* I am very unhappy about the impact to endangered flora and fauna and this should have been considered before an ill-considered cost cutting public/private partnership for a health care solution. The government has us snookered.
S424 / S498	O5	* Realising the temporary impact on some species of flora and fauna is important I still would like to say that Option 5 is the best alternative as estimation of weather patterns in the 10 year future maybe over optimistic, in other words they may be worse than anticipated
S429	O5	* Take the time to do it right so it does not need to be visited, and provide opportunity to reestablish local habitats.
S472	O5	* The additional cost of Option 4 does not appear to provide any additional benefit over Option 3 regarding road closures or management of the local flora and fauna. Option 5 whilst significantly more expensive appears to provide a significantly better road outcome and its implementation will ensure better management of local flora and fauna. When driving along the Parkway it is noticed that significant vegetation consists of varieties other than native vegetation. Therefore, as an alternative is it possible to implement a program to eradicate the non-native vegetation which will (over time) open up the flood plan and enable the natural distribution and transmission of the built up sediment (this is essentially a hybrid of Option 5).
S503	No selection	* It is the road that needs to be modified and the destruction of the natural habitat should be avoided at all costs. * All the given proposals involve serious environmental destruction including removal of large areas of bushland (over 2 hectares). You cannot replace or replicate whole ecosystems. Some of the proposed removals are threatened ecological communities and these would be impossible to replace. * The road should be elevated by bridges so that indigenous species can move from one ecosystem to the next ecosystem, otherwise disconnection occurs and native species become extinct.
S510	No selection	* All the given proposals involve serious environmental disturbance including removal of large areas of bushland (over 2 hectares). Removal of the top soil in which the bushland is growing, makes revegetation more artificial and difficult to

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		replicate whole ecosystems. Some of the proposed removals are of threatened ecological communities so these proposals are even more worrying.
S512	No selection	* The Wakehurst pw requires safe and environmentally sensitive lighting. Lighting should minimise the impact of harmful lighting on nocturnal native animals while being safe and effective.
S514	No selection	* Work towards Options 2 to 5 would destroy the ecological communities of the valley floor and a small forest's worth of trees – equal to at least 2.41 hectares. It would involve the removal of large areas of dense bushland containing valuable ecosystems – such as the threatened ecological communities of Swamp Sclerophyll Wetlands, Freshwater Wetlands, Swamp Oak Floodplains, and Coastal Saltmarsh. With some of the most biodiverse ecosystems in Greater Sydney, the area provides habitat for nationally threatened species including the Southern Brown Bandicoot, Spot-tailed Quoll, Giant Burrowing Frog, Swift Parrot, and Australian Little Bittern. Habitat would also be destroyed for many NSW threatened species, including the Powerful Owl, Masked Owl, Barking Owl, Red-crowned Toadlet, Black Bittern, Glossy Black-Cockatoo, Squirrel Glider and others.
S515	No selection	* The Parkway should be well maintained in its original form but restricted to walking, bicycles and perhaps (electric) motorcycles which would have a better result in protecting dwindling local flora and fauna and remain as an important 'lung' for the northern beaches. It is clear to see the disastrous heartbreaking result of widening Mona Vale rd and the loss of special bushland and danger to native species there. It will definitely create very much heavier traffic on that route, inevitably driving up roadkills, traffic accidents and climate chaos.
S516	No selection	(* This response is made as a private citizen living in Fairlight and as a user of the Wakehurst Parkway to travel to various commitments across the Northern Beaches. I make my response based on a 30+ year career as a research scientist, national environmental liaison officer for a national NGO, fulltime consultant to a former Federal Environment Minister, then 20+ years as a partner in a successful small environmental consultancy business specialising in bringing together diverse interests involved in projects requiring sustainable outcomes. Nine years as a Manly Councillor, during which I chaired both the Land Use Management Committee and the Sustainability Committee added to my knowledge and understanding of Local Government and its interaction with State and Federal governments.) * Native vegetation removal Each of the options considered 'feasible' will result in the removal of a significant area of vegetation, ranging from 2.41ha to 3.47ha, much of it State and/or nationally threatened ecological communities and/or significant habitat for threatened species. To this must be added further clearing that will be necessary for removal of sediment. This represents an unacceptable impact on species and ecological communities already at risk of extinction, particularly when it is the road alignment and the modifications associated with it, rather than the bushland, that have caused the flooding. *Environmental impacts & approvals The impacts of the proposed options are clearly identified within the Mitigation Feasibility Study (p.34). However, while the EPBC Act is referred to, listings of several affected species under the EPBC Act are not made clear. The impacts on Swamp Sclerophyll Forest on Coastal Floodplains (EPBC Endangered listing, Oct

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		<p>2019), Coastal Swamp Oak Floodplain Forests (EPBC Endangered listing, Nov 2018) and Subtropical and Temperate Coastal Saltmarsh (EPBC Vulnerable listed 2013) require that any proposed projects are referred for consideration by the Federal Minister for the Environment, as well as at State level. As noted above, the Mitigation Feasibility Study acknowledges that the proposed options “will have significant environmental impacts” indicating that the Federal Minister must determine whether they “have or will have”, or “are likely to have” “a significant impact on a listed threatened ecological community”.</p> <p>Greater effort (including appropriate seasonal surveys) is also required in relation to species identified as potentially occurring along the creekline affected by the proposed flood mitigation projects which are also listed under the provisions of the EPBC Act – <i>Deyeuxia appressa</i> (EPBC, endangered), <i>Triplarina imbricata</i> (EPBC, endangered), <i>Haloragodendron lucasii</i> (EPBC, endangered), <i>Persoonia mollis maxima</i> (EPBC, endangered), <i>Leptospermum deanei</i> (EPBC, vulnerable) and <i>Melaleuca biconvexa</i> (EPBC, vulnerable).</p> <p>Similarly, impacts on the Eastern Osprey (listed as a Migratory Species under the EPBC Act), the Grey Headed Flying Fox (Vulnerable under the EPBC Act), and the Large Eared Pied Bat (Vulnerable under the EPBC Act) require Federal referrals. Referral Guidelines for EPBC listed migratory species (Sept 2015, p.2) clearly contain an objective to “retain the habitats and resources necessary for these species to successfully migrate and, where appropriate, breed through their natural range in Australia” – an objective that would not be achieved if the proposed flood mitigation measures were to be implemented.</p> <p>* Over-reliance on ‘biodiversity offsets’</p> <p>Throughout the assessment of flood mitigation options, there is a strong reliance on ‘environmental offsetting’. While this is permitted under the provisions of the NSW Biodiversity Conservation Act, the requirement is for a hierarchy of actions. The Offsetting process (using the Biodiversity Development Assessment Report process, BDAR) requires that avoidance and minimising of environmental impacts are considered ahead of any decision to move to ‘offsetting’. However, the narrow set of alternative options for flood mitigation included in the Mitigation Feasibility Study means that this hierarchy of environmental considerations has not been addressed. Too often ‘offsetting’ is used as an easy way out for development, however, the whole offsetting process is flawed in significant ways, as highlighted by EDO’s Head of Policy & Lawreform, Rachel Walmsley¹ and others.</p>
S523	No selection	<p>* ALL the given proposals involve serious environmental disturbance including a) removal of large areas of bushland</p>

Table 24: Environment - protection - verbatim comments

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S1	O1	<p>* Increased housing and road development in the northern beaches LGA is having a profound affect on the natural environment of the area.</p> <p>* The potential desecration of this area to provide year round road access is yet another tragic example of how our human society continues to overrule the significance and need to preserve the natural world.</p>
S2	O1	* We need to preserve the bushland along the bends and near the Sports Academy
S3	O1	* Please don't destroy the bushland. We have lost so much bushland along the Parkway
S7	O1	<p>* ALL the given proposals involve serious environmental disturbance including removal of bushland</p> <p>* Please, put ecological well being above human convenience and financila cost benefit analysis</p>
S18	O1	* I always feel that we get it wrong whenever we try to fight against nature - we end up spending more and more money fighting a battle we can never win. Better to let nature take her course and recognise that she's the boss and we need to work with her.
S19	O1	* I wish to preserve the lagoon area in its current beautiful state.
S22	O1	* We urge council to preserve these precious ecological communities and our environmental assets. All suggested options are contrary to the stated objective in the council's strategic plan regarding the preservation of our precious bush for future generations.
S23	O1	* For all options other than option 1 the environmental impact is too great for the limited reduction of road closures.
S24	O1	* I think we should be preserving the Bush land we have and the Mona Vale Road upgrade provides alternative access.
S27	O1	<p>* We recognise the inconvenience of the occasional flooding of the Parkway but the protection of our environment, especially within such a biodiverse location, clearly deserves priority.</p> <p>* The flood-prone area as such is equally rather uncommon, as most of our natural swamp lands have been filled in, mostly by being used as tips.</p> <p>* We think restoration and regeneration, rather than than the removal of bush, could provide equally good results in regards to flood mitigation. Council should use the allocated money to test flood mitigation through vegetation restoration and implement all necessary monitoring to contribute in a scientific way to alternative flood mitigation.</p>
S29	O1	<p>We are all aware of the challenges of the future. Whether we like it or not, we will have to get to 1) Zero Carbon Emissions and to 2) Preserving Biodiversity.</p> <p>Both of these aims or needs require rethinking of our way we are living. Driving cars, even if it is an electric vehicle, is not the transport solution for the future.</p> <p>With this in mind, we should plan our infrastructure for the future. We must make active and public transport more attractive and not lure people to stick to their cars.</p> <p>If we would do the more effective flood proofing of the Parkway, we not only facilitate car driving but also demonstrate our disregard for the need to protect biodiversity, by allowing over 2.5 ha of trees/ bush and habitat being cut down and disturbing sediments which will be flushed into Narrabeen Lagoon, which is our lagoon with the highest scoring quality. Not only would we demonstrate our resistance to change to other priorities in transport facilitation but we would also eradicate one of the last small floodplains in our LGA in existence.</p>
S33	O1	* All our wet lands have been filled in its absolutely disgusting what PREVIOUS councils have done to the environment and this one has already plans to increase damage to what is left.
S34	O1	* I do not want any destruction of the bush area of the bends or lower creek area next to the Lagoon. These areas are already damaged by weeds and have been helped by recent bush regeneration. Occasional flooding reflects the removal of bush upstream as much as the road. Removal of further vegetation and the flood plain area will Sørensen the speed of run off.

Sub no	Option selected	Verbatim comments – environment – protection
S38	O1	<p>* I'm strongly opposed to any action being taken and support the DO NOTHING proposal, because the reality is that the retention of all the remaining forest in the Parkway is an essential requirement for the healthy survival of the lagoon.</p> <p>* One of the reasons given by State Planning Minister Stokes for amalgamating the 3 councils was to preserve the integrity of Narrabeen Lagoon, so that the catchment's protection was optimised by unified management in a bigger council. Yet here we are, facing the prospect of damaging roadworks through the catchment, plus the likelihood of 3 hectares of pristine bushland being lost. Council must go back to the state government and ask for a properly funded solution that raises the road without destroying the forest. The cumulative impact of tree loss must be taken into account when the other end of the Parkway is expected to be losing thousands of trees to the Northconnex Tunnel Project as well.</p>
S41	O1	* I think the negative environmental impact of the work outweighs the benefit gained and I don't think anything needs to be done. I'm against the proposal.
S42	O1	* Do nothing, the other options are environmental disasters not options
S44	O1	* All options outlined here result in massive bush destruction and do not fix the problem of flooding.
S48	O1	*The destruction of bush is not acceptable
S50	O1	*Continue with bushregeneration in the Middle Creek Corridor, support the native vegetation as it can suck up a lot of rainwater and act as a sponge and consider to acquire extra land in the Middle Creek corridor to plant out with indigenous vegetation to soak up even more water in high rainfall events.
S51	O1	* Enough is enough. Too much of the unique native bushland of the northern beaches has been lost.
S54	O1	* They guarantee environmental damage, for only a reduction in flooding
S58 / S208	O1	* The negative-to-disastrous effects on the environment & wildlife along the Parkway north corridor are not worth the results.
S60	O1	* Enough wildlife is ran over on the Wakehurst which is littered with garbage like every other road on the northern beaches (mona Vale is another disgrace).
S61	O1	<p>* I think there has been a lot of ecological damages around the area, e.g. Northern Beaches hospital and Mona Vale road widening, and we need to start thinking about living with the nature and reducing humans footprint on the environment to ensure future generations of residents still enjoy and benefit from the Northern Beaches' natural beauty and for the nature itself to have a chance to live and flourish. A paradigm shift has to be done from human centric solutions to the problems to living with nature as nature is also living beings which need to be respected and protected.</p> <p>Full disclosure, I have lived in NB for more than 8 years and I use The Parkway almost daily and I also often use NB's hospitals services, but I believe we could have done better for the environment.</p>
S66	O1	<p>* I'm greatly concerned about the environmental impacts of the proposal.</p> <p>* If any form of proposal goes ahead there, council should commit to delivering more offsets than required under legislation so that the proposal may deliver a net benefit to the environment.</p>
S70	O1	* We should realize that we have to live with the environment.
S72	O1	* Losing or damaging our local ecology IS a disaster. If people want a location where cars come first, where they can't deal with a small inconvenience, why not live somewhere else?
S78	O1	* I am very concerned about the environmental impact this will have.
S79	O1	* So much land clearing around the Northern Beaches already, don't do any more please.
S85	O1	* please stop fiddling with our natural spaces
S86	O1	* I would like an historical perspective on flooding - if flooding is a usual regular event it should not altered to limit that. If it good for the health of the creek system leading into Narrabeen lake that there be regular water flows (ie floods) then the impact on the enviroment should be nil.

Sub no	Option selected	Verbatim comments – environment – protection
S91 / S379	O1	* My preference would be for option 5, subject to a detailed environmental impact assessment. The mitigation elements could therefore be reduced or altered subject to this assessment. Perhaps some imaginative solutions to reduce the impact on the wetlands could be found (e.g. active weirs and/or pumping stations rather than culverts), even if this results in high costs.
S92	O1	* Given the mass subdivision planned for Ingleside, the clearing of five football fields of vegetation must not occur - it is way too big a pay off to deal with six road closures. The Shri King environmental habitat is highly distressing. There is no thought to the wildlife that we live amongst. This is why many of us moved here. And living in such an environmentally-rich area means somethings we might have to deal with natural elements such as bushfires and floods. It is not the sole thoroughfare - please do not destroy the environment for a road
S94	O1	* People on the northern beaches proudly care about the environment. Significant flora and fauna were cleared for the Mona Vale road development. If we are not careful we will not have any significant bushland areas left. As planners you must think of that. Once it's gone it's gone. It's irreplaceable. As the saying goes "only when the last tree is cut down will we realise we can't eat money". As humans we depend on nature like this thriving to keep the temperature low. It sustains us, and it is never efficient or wise to destroy what sustains us. Therefore instead of cutting it down we need to consider a lifestyle shift towards working around the natural environment. It is part of life that occasionally this road floods. The song that you can "be in paradise and put up a parking lot" resonates
S97	O1	*The Forest High School removal (which incidentally is the stupidest idea I have ever heard) will also impact environmentally in this same area, When is it going to stop? It has to stop before the Northern Beaches is wrecked.
S98 / S201	O1	* Very difficult to see a return on investment for the large outlay when alternative traffic routes are available and the cost to the environment is very high.
S101	O1	* Do nothing to endanger or alter the natural environment. It's a flood plain for a reason the ecology of the area depends on the water course and the benefits it provides to the immediate area.
S102	O1	* To ruin the environment for a couple of days less of flooding a year is vandalism. The natural beauty of this area is constantly under attack, but SHOULD be sacrosanct. Once these places are gone they don't come back. If the flooding is too much inconvenience for someone, there are plenty of places to live where this doesn't happen. Stop ruining our beautiful area!!
S107	O1	* It should be treasured and protected.
S113	O1	* The best idea is to stop overdevelopment in the area. Plant more trees, especially natives! * If option 2 were to go ahead and native vegetation were to be removed, a massive replanting of vegetation needs to take place in the area to compensate for the destruction. * The destruction of the northern beaches needs to stop.
S118	O1	*If drivers have issues with the minimal time of flooding that occurs each year why not get up earlier and use Pittwater Rd or Forest Way. Why destroy the flora fauna and aboriginal history as well as using up so much funding when The Parkway is closed for only a couple of days each year. What a waste of time.
S122	O1	* The remnant bushland surrounding the Parkway is important to protect the Narabeen Lagoon catchment and as one of the remaining wildlife corridors from Garigal National park and Manly war memorial park down to Narrabeen lagoon. I acknowledge the issues with flooding on the Parkway but any work conducted should be done with minimal impact to the local natural environment.
S124	O1	* Our family are totally opposed to any and all of the above options, and in addition do not want a NB tunnel that will also destroy huge swathes of bushland at the southern end of The Parkway and pollute Manly Dam - and then push further traffic onto the above environmentally sensitive section of the Parkway. - Stop the excessive push for development & population increases on and around Our

Sub no	Option selected	Verbatim comments – environment – protection
		environmentally sensitive The Parkway and the Pittwater area in general and let it be the lungs of Sydney, instead of further hard surface & destruction of important ecological communities. * This will cause huge environmental damage to enormous sections of bushland and will not solve the problem.
S127	O1	* We are strongly opposed to any options, as the impact it has on the environment is far more negative than the handful of closures we possibly will have each year.
S131	O1	* The environmental impacts are significant and unacceptable, particularly because the solutions proposed do not entirely remove the risk of floods.
S132	O1	* I was simply horrified by the vegetation clearance necessary even to implement the B1 option. Deep and Middle Creek host such a unique ecosystem and once again we go and solve our self-generated (over sedimentation) little first-world problems with an army of fossil fuel powered machinery (it's just too easy!).
S135	O1	* not about the money but environmental impact. please leave this area alone.
S139	O1	* Improve the existing roads, Pittwater Rd leading to Warringah Road and Forrest Way. The natural vegetation alongside Mona Vale Road has already been decimated due to road works.
S142	O1	* There have been environmental concerns raised. Hopefully the cure isn't worse than the condition !
S149	O1	* I cannot justify the loss of habitat and tree destruction when an all weather route (Mona Vale road) will exist on the few days a year the Parkway closes.
S150	O1	* Destroying native lands and environmental impacts are too great.
S151	O1	* The environment should not be sacrificed for the State government decision to build a new hospital at the end of a single lane, flood prone road.
S152	O1	* No mention of the environmental impact of any of the options, which is expected to be significant for all of them (except do nothing obviously). Besides, the cost-benefit analysis does not stack up for any of the destructive options.
S162	O1	* It is our community's responsibility to protect our precious eco-systems from human impact.
S164	O1	* Thank you for requesting community input. The impact on the natural environment seem too high to me
S165	O1	* The environmental impacts of the other options are too great. Construction and truck movements will cause far greater disruption than the few times a year it floods.
S168	O1	* The environmental impacts are too great for any improvements . People of the northern beaches value their environment more than the roads, if they valued the road they would live else where
S172	O1	* Protect the environment and leave the Parkway and surrounding area as is. As you have stated, any works will only have a minimal impact on closures(eg stop 6 closures per year) and those who use it have an alternate way regardless. We need to protect the environment, bushland, vegetation and local animals
S176	O1	*Option 1 - No impact to the environment please. Thank you.
S177	O1	*Conservation of the corridor is paramount. Flood events are rare.
S179	O1	* Keep all trees unless they are in a danger of falling on passing traffic.
S184	O1	* We need to protect and retain the area.
S187	O1	* Too many trees are being cleared in the Northern Beaches region. Time to start protecting our beautiful environment above all else. Do not remove any trees on The Parkway, find another solution or live with it as is.
S189	O1	* Too much environmental impact with current options.
S190	O1	* No trees to be lost
S192	O1	* Please consider the 'do nothing' option strongly. All other options seem like a hell of a lot of money to spend on alleviating some sporadic inconveniences for motorists at the expense of significant damage to the environment.
S196	O1	* The duplication of Mona Vale mitigates against the need to undertake this work. The impact on the environment is too great to justify the proposals.

Sub no	Option selected	Verbatim comments – environment – protection
S198	O1	* The sheer cost and environmental damage associated with all other options, with apparent limited public benefit, should make it apparent to anyone that no action should be taken.
S199	O1	* Leave the environment as it is
S204	O1	* I would rather leave the Parkway as it is. We have lost so much natural vegetation as it is, that to remove more would be sinful. * Please don't trash the area
S205	O1	* My preference for options to reduce flooding on The Parkway is Option 1: Do Nothing. The remaining Options B2, B3, B4 are likely to have a significant impact on the environment. The main focus of the Flood Mitigation Options is to reduce the incidence of flood events in order to avoid traffic diversions and inconvenience for road users. Although this outcome has merit, on balance I prefer to assign a higher priority to protecting the environment. * The benefit of the proposed Flood Mitigation Options is easily quantified in terms of reducing the incidence of flood events during the year. However, preserving the environment has multiple benefits that are difficult to quantify.
S521	O1	* Conclusion Human intervention is the largest threat to the catchment of Narrabeen Lagoon. This catchment area was noted by the Hon. Bob Debus as "Sydney's largest coastal lagoon, home to a rich array of plant and wildlife species ... that should be protected forever". Actions projected by this study will deliver degraded environmental outcomes to provide negligible benefit. Any work to mitigate flood activity defies logic and should not proceed.
S206	O2	At the outset, I would like to commend the Council for maintain the single lane road access in each direction for the Parkway, especially east of Oxford Falls and through to North Narrabeen at Elanora Road. It is essential to maintain the heritage, cultural, and environmental values of this roadway and its surrounding bushland. Option 2 (B5 as shown in the Table) is the best solution as: *It reduces closures to an average of 4 times per year. This is most acceptable based on the upgrade of Mona Vale Road and other access points from the Northern Beaches via Elanora Heights to Mona Vale Road, through Cromer to Warringah Road at Beacon Hill and via Pittwater Road through Dee Why to Warringah Road. * \$4.5m cost seems reasonable. * From the aerial photographs on display, it maintains the heritage, cultural and environmental integrity of the road and the surrounding bushland. *It has no impact on threatened ecological communities i.e. the Swamp Sclerophyll Forest, Fresh Water Wetlands, Floodplain Forest, and Coastal Saltmarsh. *The sediment removal is not currently assessed as having an impact on aquatic habitats.
S210	O2	* My preference is for B1, given the significant environmental impacts from the other options.
S215	O2	* This unique pocket of natural environment must be preserved.
S218 / S529	O3	* I believe any changes to the Parkway needs to have suitable protection for native wild animals and bush land. This would either include underpasses or overpasses for native animals to cross the parkway and avoid car accidents and protect wildlife. There would need to be fences as well to avoid the mentioned accidents. There need be more than two or three protected crossings. One isn't enough. In addition any lost habitat will need be replaced in another location. Maybe extend current protected areas as enough land has been lost due to development.
S233	O3	* Minimum environmental impact and liveable average flood per year forecast.
S235	O3	* I would like to know if it could be advantageous to undertake weed eradication work at the time of the remediation.

Sub no	Option selected	Verbatim comments – environment – protection
S241	O4	<p>* The options we are asked to consider would cause much disturbance and destruction of bushland. This at a time when we are becoming aware once more of the value of bushland to us and the necessity to live with nature rather than trying to dominate it.</p> <p>* If the bridges were raised above the level of the land it would allow wildlife to move around freely. We are also being forced by circumstance to recognise the value of wildlife in maintaining the environment in which we all live.</p> <p>Above all, we must retain the bushland that we have and not desecrate it in pursuit of short-term savings.</p>
S245	O4	<p>* A reduction of 1 closure in two years for Option 5 not worth \$4million and increased environmental impact.</p>
S247	O4	<p>* With option B4 it is not clear that the access for material removal would be 'integrated' into the environment as well as supporting ongoing maintenance etc. for future years vs the option 4.</p> <p>Land always moves, a combination of the Physics behind it,</p> <p>Will the material removed be used and will consideration be made for effective capture of any buried carbon decay. Use for other sinks.</p> <p>A topographical map of the model and works would assist in presenting.</p>
S249	O4	<p>* This will help in continuous flow of water towards culvert even when flash flooding</p>
S250 / S274	O5	<p>* Yes upgrade the existing culverts. Put in new ones where needed . Clear the high bank of the road.</p> <p>Also get excavators to make more drainage from the side of the road.</p> <p>* The Best.</p>
S256	O5	<p>* I understand that there will be environment issues but feel that the well-being of the residents on the peninsula should take precedent.</p> <p>The nature vegetation that this proposal will affect over time will be restored.</p>
S257	O5	<p>* Option 5 provides best protection.</p>
S277	O5	<p>* The main problem of flooding is the inability for creek water to quickly enter Narrabeen Lake. This is because it is in serious need of dredging west of Narrabeen Bridge. Not only is The Parkway effected by flooding the surrounds of the lake also suffer flooding due to decades of allowing the silt to flow into the lake making it ridiculously shallow. It is only a matter of time before it is known as Narrabeen Swamp. Dredging worked 60 years ago & reduced swamps in North Narrabeen & Warriewood so focus on that issue & the Parkway flooding will be greatly reduced.</p>
S278	O5	<p>* It has always been obvious that the waterway is substantially blocked up with vegetation, and needs to be restored to normal operation</p>
S280	O5	<p>* Best balance between cost, effectiveness and env. Impact</p>
S283	O5	<p>* Have you considered a permanent solution to the lake opening so that would minimize flooding on the parkway</p>
S305	O5	<p>* I also recommend a storage pit at the lowest level off the road, to provide a place for the water to drain.</p>
S317	O5	<p>* Also need to dredge where Deep Creek enters Narrabeen Lagoon. The very shallow depth will limit the amount of water that will flow from the creek after these other improvements.</p>
S329	O5	<p>* Pending further environmental investigations it would be great if we could reduce the flooding of the Parkway to only once every two years.</p>
S376	O5	<p>* Afterwards, work should be done to enhance the natural environment around the sites with the aim of leaving it in a better state than it is now.</p>
S380	O5	<p>* Most environmental damage can over time be mitigated with replanting and other land, water and fauna management measures. Do it now or pay a greater economic and environment price later.</p>
S382	O5	<p>* With increased population planned on NB and construction of Tunnel more cars will be using our roadways including The Parkway. Therefore, closures during flood events would not be a</p>

Sub no	Option selected	Verbatim comments – environment – protection
		popular outcome. Option 5 appears to provide the best movement of traffic as well as cater for wildlife with underpasses and sensitive removal of sediment.
S413 / S500	O5	* The environment will eventually recover again as long as it's done proper & smart in the first place.
S414 / S502	O5	* Re the fauna - stop clearing their habitat over the rest of the peninsular! Too many trees have been chopped down already.
S415	O5	* Environmental impact should be considered but not at the expense of fixing this road.
S419	O5	* Sounds like a sensible approach although slightly concerned about environmental impacts but I'm hoping that comes out of next phase.
S450	O5	* Given environmental impacts are similar for less effective options, this recommendation is optimal. Provided environment restored post construction . If significant environmental objections are raised by the public, then Option 1 is only viable option.
S492	O5	* It is sad that the environment will be damaged but this work is necessary
S509	No selection	* I would hate to see any trees chopped down and any changes. * Two other routes to northern beaches and look at the Mona vale road , all that destruction
S511	No selection	* I have watched the various attempts to clean up the area by various councils ie weed control (morning glory and lantana to name a few) and native plantings. * So why are we destroying so much of this amazing environment to achieve a mediocre result? Also the visual waterproof barriers along the lake will destroy the natural beauty of the area.
S514	No selection	* Environmentalists and other residents value the bushland and creeks surrounding this road for the wildlife habitat they provide, Aboriginal sites and their natural beauty.
S522	No selection	* Please do the job properly, please do it right for the land, animals rate paying/tax paying people. Don't save a buck and impact the environment. Do it properly once and then its done. Please don't put greed before our planet!

Table 25: Environment - contamination - verbatim comments

Sub no	Option selected	Verbatim comments – environment - contamination
S4	O1	* ALL of these proposals involve serious environmental disturbance including b) exposing contaminated sediments that would need to be treated (and the cost of decontaminating those sediments is not revealed)
S8	O1	* ALL of these proposals involve serious environmental disturbance including b) exposing contaminated sediments that would need to be treated (and the cost of decontaminating those sediments is not revealed)
S10	O1	* ALL of these proposals involve serious environmental disturbance including b) exposing contaminated sediments that would need to be treated (and the cost of decontaminating those sediments is not revealed)
S14	O1	* The report outlines the significant amounts of acid sulfate soils and silt contaminated with heavy metals. Even with the best will in the world, disturbing those soils will lead to dangerous pollution entering Narrabeen Lagoon and having an unfavorable impact on the animals and plants that live in and around the lagoon.

Sub no	Option selected	Verbatim comments – environment - contamination
S38	O1	* The environmental impacts and costs must be provided fully before any decisions are made and can be weighed up realistically in a public consultation or by council. Massive movement of soil and extensive groundwork will expose contaminated sediments, including benzene and lead, that will need to be treated. However, the cost of de-contaminating those sediments is not even included. The effects flowing from the removal of sediment, on the ecology and fish species in Middle Creek, with their potential to pollute the lagoon as well, have yet to be investigated.
S45	O1	* All the options described in this proposal will inflict irreparable damage on the ecosystems in and around Narrabeen Lagoon, with far-reaching and unpredictable ramifications for the biodiversity of the area. Not least because of the proposed exposure and release of contaminated sediments into the environment.
S48	O1	* The risk of contamination of the lagoon is very high. The lagoon is used by thousands of people.
S56	O1	* ALL the given proposals involve serious environmental disturbance including b) exposing contaminated sediments that would need to be treated (and the cost of de-contaminating those sediments is not revealed)
S62	O1	* ALL the given proposals involve serious environmental disturbance including b) exposing contaminated sediments that would need to be treated (and the cost of de-contaminating those sediments is not revealed)
S64	O1	* The choice of actions are to remove 3 hectares of pristine bushland and to remove 1 kilometre at 1 metre depth of the soil in middle creek to stop the road flooding. The soil is known to be contaminated with lead and benzene. * ALL the given proposals involve serious environmental disturbance including a) removal of large areas of bushland and b) exposing contaminated sediments that would need to be treated (and the cost of de-contaminating those sediments is not revealed)
S124	O1	* There will be contaminated sediment washing into Narrabeen Lagoon and down Middle Creek, potentially poisoning the waterway which is habitat for the endangered myriad of birds and animals listed AB129above.
S136	O1	* Disturbance of soils not only damages tree cover but could lead to increased PASS (potential acid sulphate soils), particularly during construction but also ongoing during flooding. Costs must be included to treat and ongoing management. The best option should be to leave flood plain soil in place. Exposure of PASS will kill soil biota and insects, leading to knock on effects of larger animals. It seems remiss that new options, as used in the Netherlands for pontoon roads, are not considered. * Having a look at the culverts, there is also costs for handling toxic areas (culvert 4) that do not seem to have been adequately costed. Further testing is required for half of the sampled sites
S145	O1	* ALL the given proposals involve serious environmental disturbance including b) exposing contaminated sediments that would need to be treated (the cost of de-contaminating those sediments is not revealed)
S157	O1	* ALL the given proposals involve serious environmental disturbance including b) exposing contaminated sediments that would need to be treated (and the cost of de-contaminating those sediments is not revealed)
S203	O1	* The exposure and release of contaminated sediments into the environment will have farreaching effects for the Lagoon and the forests that surround it.
S205	O1	*Water quality Sediment removal and culvert upgrades will result in adverse impacts and unknown risks to water quality in Middle Creek and Narrabeen Lagoon. "Removal of vegetation has the Page potential to increase sedimentation downstream at Narrabeen Lagoon potentially impacting on water quality there through increased turbidity and settling of sediments." The risk of deterioration in water quality in Middle Creek and Narrabeen Lagoon is a health and environment issue.

Sub no	Option selected	Verbatim comments – environment - contamination
S530	O1	* I am still extremely concerned about the potential for the contaminated soil in the middle Creek catchment. I don't feel that we can really make a proper assessment until we know the extent and amount of contaminants in this catchment.
S531	O1	* Contaminated sediment will be released into the environment and impact the lagoon and surrounding forest.
S324	O5	* I believe this option also include a turbidity pool in order to collect further sediment as well as other potential contaminants coming from the areas upstream. WSC already preformed a study prior to 2004 and came up with a similar plan except it did not include levees to my knowledge. David James who was a WSC Cr at the time and went on to become the Mayor of Pittwater council later told me of this study and subsequent recommendation. I believe the addition of a turbidity pool will future proof the proposed works somewhat and will help council maintain the creek levels going forward. <i>(included with this response was a 115p report by SMEC)</i>
S503	No selection	*The proposed alterations to The Parkway would also have a deleterious effect to the water quality in Narrabeen Lagoon. The removed sediments would need to be trucked out and treated and the cost of de-contaminating those sediments is not revealed.
S507	No selection	* The environmental damage caused by all of the options includes destruction of large areas of bushland and exposure of contaminated sediments which would have to be treated.
S510	No selection	* Disturbing and exposing contaminated sediments is a risk to the water quality in Narrabeen Lagoon. The removed sediments would need to be trucked out and treated and the cost of de-contaminating those sediments is not revealed. This is a serious omission when the public is being asked to evaluate the proposals.
S514	No selection	* Contaminated sediments, including benzene and lead, would also be exposed by the earthworks, Neither plans for their removal nor possible effects on species in Middle Creek and Narrabeen Lagoon have been assessed. Any sedimentation of the lagoon or its catchment must be prevented in an upgrade of the parkway.
S516	No selection	(* This response is made as a private citizen living in Fairlight and as a user of the Wakehurst Parkway to travel to various commitments across the Northern Beaches. I make my response based on a 30+ year career as a research scientist, national environmental liaison officer for a national NGO, fulltime consultant to a former Federal Environment Minister, then 20+ years as a partner in a successful small environmental consultancy business specialising in bringing together diverse interests involved in projects requiring sustainable outcomes. Nine years as a Manly Councillor, during which I chaired both the Land Use Management Committee and the Sustainability Committee added to my knowledge and understanding of Local Government and its interaction with State and Federal governments.) * Contaminated sediments As the Mitigation Feasibility Study (p.38) identifies "Land contamination presents a major consideration". As is common in areas impacted by road runoff, the material proposed for excavation has "elevated benzo(a)pyrene, nickel and lead content, making it unsuitable for recycling". The costs of decontamination and/or disposal for these sediments does not appear to be included in the assessment of options. That this could be substantial is recognised in consideration of the residual risks within the Study report, which acknowledges the possibility that disposal costs could "likely render the option unfeasible due to cost" (p.7). When these issues are combined with advice from Pietsch and Soil Conservation Services (see p.35 of the Mitigation Feasibility Study) that "dredging of the channel is not recommended, as it could cause upstream instability and remobilisation of the store of sediment on the floodplain" and the fact that the dredged channel "could simply infill if some or all of the [sediment in the floodplain sink] was retained within the channel" make this an undesirable approach. 1 Walmsley R: https://www.edonsw.org.au/political_endorsement_of_extinction .

Sub no	Option selected	Verbatim comments – environment - contamination
S523	No selection	* ALL the given proposals involve serious environmental disturbance including b) exposing contaminated sediments that would need to be treated (and the cost of de-contaminating those sediments is not revealed)

Table 26: Funding - verbatim comments

Sub no	Option selected	Verbatim comments - Funding
S1	O1	* Lets spend our revenue in ways that promote other key priorities for the area. Please don't destroy the Parkway.
S8	O1	* The Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a crucial link that needs to be properly funded by State Government.
S10	O1	* The Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a crucial link that needs to be properly funded by State Government.
S12	O1	* It is completely unfair to expect local Council to foot the bill for the development of the Parkway, which is a State road. It was the State government that closed down Mona Vale hospital, making the Northern Beaches population reliant on the unreliable The Parkway for hospital access. This was evidently a bad idea in the first place, and the State government needs to foot the bill to make up for it, and to assuage the vulnerability it has created. As a Northern Beaches resident and rate-payer, I object to the options and funding avenues described in this proposal.
S14	O1	* Any work should be funded entirely by the State Government - The State Govt put the hospital at the end of the Parkway - they should fund any upgrades to the Parkway so that people can get to the hospital without being flooded out.
S15	O1	* There is insufficient funding to both safeguard damage to the environment.
S16	O1	* The money would be better spent renovating the upstream environment to slow the flow of water and putting in better public transport options. Flying cars are probably not that far away anyway.
S20	O1	* Far more money is required to enable better less invasive options.
S37	O1	* The budget given to carry out what is really, just remediation work, is miniscule compared to what needs to be spent on a roadway in environmentally sensitive lands.
S38	O1	* Thanks for the opportunity to comment, because when looking at the options, it appears that the state government has not provided the northern beaches council with enough funding to fulfil what is actually a state govt responsibility – the provision of key infrastructure, crucial link roads.
S40	O1	* Alternative is having the State Government fund the fixing of the Parkway properly as it is a crucial link to the NBhospital.
S45	O1	*It is completely unfair to expect local Council to foot the bill for the development of the Parkway, which is a State road.
S49	O1	* Please spend the money putting real grass back on the ovals or improving walking tracks.
S52 / S377	O1	* How will this project be funded? - State/RMS/TfNSW? or Local/ratepayers?
S54	O1	* The NSW government has record revenues from stamp duty from the housing boom in the state, they can afford to allocate funding for a road raising project.
S56	O1	* The Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a crucial link that needs to be properly funded by State Government.

S62	O1	* The Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a crucial link that needs to be properly funded by State Government.
S64	O1	* The Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a crucial link that needs to be properly funded by State Government.
S83	O1	* This does not seem to be a good use of available funds.
S84	O1	* An alternative suggestion solving two problems - a raised roadway, high enough to allow water and wildlife to flow/travel underneath. This could be done gradually as funding became available.
S88	O1	* The Parkway is a NSW state-owned road and needs to be funded to provide better solutions. * Scouring and removing sediment will increasingly become regular maintenance work the bill paid by northern beaches Council. The NSW government seems to have plenty of money to spend on roads we should request some via local MPs James Griffin and Rob Stokes to pay for this work.
S89	O1	* I read that you have around \$14million available from the State Government and this should be adequate if handled sensibly and without a host of studies. Just get on with it!
S91 / S379	O1	* The council could discuss with the state government whether some of this additional cost could be covered by them under their Smart Cities or Environmental Protection funding initiatives.
S107	O1	* This will save huge costs which can be redirected to other projects and save any impact on the environment.
S110	O1	* the Parkway upgrade needs to be done once and done well. If this means additional funding needs to be sourced – so be it. The cost of a significant project is temporary. The legacy of a significant project is permanent.
S126	O1	* Funding must be provided by all levels of government for this upgrade.
S131	O1	* RMS should be investing adequate funds to properly upgrade the parkway instead of relying on Local Government to fund it, which has resulted in the Council putting forward environmentally damaging band-aid solutions which still do not remove all flood risk.
S132	O1	* Let's redirect that money to more crucial and long terms threats (e.g. coastal erosion) or to life-threatening infrastructure (middle-creek bridge) or less eco-impactful recreational infrastructure (council supported MTB natural trail network).
S161	O1	* That money would be better placed going to other causes and services on the Northern Beaches.
S172	O1	* Maybe spend the money on cleaning the rubbish off the side of the Parkway instead. Its terrible Save the money on cleaning up the bushland. On top of a ridge at Cromer heights is a massive gazebo that needs to be cleaned up. Call me for more details
S178	O1	* I AM SURE COUNCIL COULD FIND A BETTER USE OF ALL THAT MONEY- KEEP NARRABEEN LAGOON OPEN TO THE SEA.
S196	O1	* Spend the money on duplicating the section south of Dreadnought Rd.
S203	O1	*STATE GOVT SHOULD PROVIDE FUNDS the Parkway is a state road, and therefore local council should not be expected to foot the bill for its upgrade. This is especially clear in light of the State government's decision to defund the Mona Vale Hospital – a decision which left the Northern Beaches population reliant on the unreliable The Parkway for hospital access. The State government should foot the bill to make up for this error. * Please reconsider this project with new options when the State government has pledged enough money to build proper bridges at critical points, or, better yet, to revitalise Mona Vale hospital, so that the health of the local community no longer impinges on an unreliable road

S205	O1	<p>*Funding and resources The flood mitigation project will consume a lot of time, expertise and money – including the time and expertise of Council staff and consultants. The project has the potential to divert resources from other projects with an environmental focus.</p> <p>* Funding for environmental and catchment protection is a priority to prevent the further loss of biodiversity and to avoid increased erosion and sedimentation in waterways.</p>
S531	O1	<p>* Mona Vale hospital was defunded by the State Government and now we have to travel to Northern Beaches Hospital so the State Government should fund this.</p>
S210	O2	<p>* Those residents and businesses know that area is prone to flooding, and given the age of the development in the area, would have known prior to purchasing properties there. Spending \$1.4M - \$1.8M of public money to fix a problem that they know existed before moving there is unacceptable.</p>
S226	O3	<p>* My thoughts are that it would be a considerable waste of money completing Option 5 as there won't be a 100% guarantee of no closures- As nature can't be controlled. Use the taxpayers money for something else</p>
S230	O3	<p>* How about allocating some of the funds from Parks for the People towards this project then Council would be able to afford Option 5</p>
S240	O3	<p>* As a regular user of the Parkway travelling to Mona Vale and Bilgola Plateau, it is a laughable situation to think that this road that was created in the last century is still at last century standard and state government can't find the funds to bring it up to speed and that the local government instrumentalities are burdened with the majority of the costs</p>
S287	O5	<p>* The other challenge is of course budget - i.e. is the \$17.5m sufficient.</p>
S354	O5	<p>* Not sure why the state government should not be contributing more since this is the main road to the Northern Beaches Hospital.</p>
S402	O5	<p>* Option 5 is the best. However it will require maintenance over a few decades to ensure that sediment build up does not increase drastically again which will require ongoing funding and support from the state/ federal government</p>
S421	O5	<p>* I believe the taxpayers money should be used for this. Its they (the tax payers) who suffer from lost productivity when the flooding occurs.</p>
S503	No selection	<p>* The Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a necessary link that needs to be properly funded by State Government.</p>
S510	No selection	<p>* The Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a crucial link that needs to be properly funded by State Government.</p>
S511	No selection	<p>* I believe the road is a NSW Govt road, but the NSW Government is only offering the council a 'grant' to fix the problem.</p>
S513	No selection	<p>* The NSW Government should be funding this, NOT Council. They built the Hospital at Frenchs Forest instead of rebuilding and retaining Mona Vale Hospital as a tier 1 facility.</p>
S514	No selection	<p>* The local council should not be left to carry any of the financial burden and responsibility for construction. * However, the community must not be expected to carry the cost of such an upgrade and under no circumstances should the Parkway become a tollway. Drivers and their passengers should not have to pay to access the hospital.</p>
S516	No selection	<p>(* This response is made as a private citizen living in Fairlight and as a user of the Wakehurst Parkway to travel to various commitments across the Northern Beaches. I make my response based on a 30+ year career as a research scientist, national environmental liaison officer for a national NGO, fulltime consultant to a former Federal Environment Minister, then 20+ years as a partner in a successful small environmental consultancy business specialising in bringing together diverse interests involved in projects requiring sustainable outcomes. Nine years as a Manly Councillor, during which I chaired both the Land Use Management Committee and the Sustainability Committee added to my knowledge and understanding of Local Government and its interaction with State and Federal governments.) * As is acknowledged in Council's response to Frequently Asked Questions, "mitigating the impact of these [more intense floods – likely as a result of climate change] events will need</p>

		significant amounts of investment...". Given that the Parkway is a State asset, which provides an important link between the Northern Beaches and other parts of Sydney, and services both a regional hospital and a growth area at Frenchs Forest, flood mitigation should be properly funded by the State Government (if necessary with support from the Federal Government). Elevation of the road by bridges at critical flood points should be properly assessed and costed, and the environmental and economic costs of more permanently flood-proofing the road made public before any decision to proceed is considered. Council's role in achieving this outcome is largely to advocate for broader considerations, and for the necessity of State and/or Federal funding to achieve more appropriate outcomes
S518	No selection	* The amount of money allocated is insufficient to address the frequent occurrence of flooding.
S523	No selection	* The Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a crucial link that needs to be properly funded by State Government.

Table 27: Other Government Issues - verbatim comments

Sub no	Option selected	Verbatim comments – other Government issues
S4	O1	* The Northern Beaches Council has been requested to provide solutions that involve damage and destruction of the surrounding bushland - letting the RMS off the hook from having to do anything about the road itself. It is a State Government responsibility.
S45	O1	* It was the State government that closed down Mona Vale hospital, making the Northern Beaches population reliant on the unreliable The Parkway for hospital access. This was evidently a bad idea in the first place, and the State government needs to foot the bill to make up for it, and to assuage the vulnerability it has created. As a Northern Beaches resident and rate-payer, I object to the options and funding avenues described in this proposal.
S54	O1	*Simply promising environmental offsets to offset the guaranteed damage from the council's proposals is not acceptable. It is well known that the offsets system is a failure: <ul style="list-style-type: none"> • https://www.google.com.au/amp/s/amp.theguardian.com/environment/2021/jun/25/nsw-inquiry-to-scrutinise-use-of-environmental-offsets • the land provided as offset is never equivalent to the land destroyed • the offset system has been found to be so likely to be corrupted that there is a current investigation underway (see article link above) • in practice offsets act to simply allow environmentally damaging development to proceed, whilst creating the appearance of mitigating the damage, without actually doing so
S110	O1	* It's unlikely there will be another opportunity to upgrade the Parkway for another 50 years if one of these proposed options is realised. The significant disruption to traffic for more than 40+ weeks does not offset the insignificant short- or long-term benefit of the project. New hospitals are typically required to be designed to accommodate a 1:10,000 PMF event for obvious reasons. What PMF event should the main arterial road connecting the entire population of the peninsula to the Northern Beaches Hospital be designed to withstand?
S116	O1	* Council need to lobby state govt to release all research and costing to raise the road at key points - mainly the low lying bends.

Sub no	Option selected	Verbatim comments – other Government issues
S117 / S148	O1	* The State Government promised that the flooding on the Parkway would be solved before the new hospital opened. An undertaken not kept. However "The raising of The Parkway in key locations and corresponding culvert upgrades appeared to provide a longer-term sustainable option to permanently reduce the incidence of flooding and road closures in larger flood events, however this would have a significant capital cost and would also likely have environmental impacts. The raising of The Parkway is not under further investigation and was discounted as an option from this assessment." (Parkway feasibility study,8/3/21)
S124	O1	* This is a State government road and should not be dealt with by NBC.
S140	O1	* Also any upgrade will just be a reason for the State Government to push even more housing into the Northern Beaches (as we already see with the Mona Vale Road upgrade), resulting in higher density and more traffic.
S205	O1	* State Government (RMS) It would be a mistake to encourage the RMS to undertake an expensive upgrade that involves conventional road construction and widening The Parkway. Road widening would require extensive clearing of vegetation and is likely to have a devastating impact on the sensitive environment of Middle Creek Valley. Since 2014 over a billion dollars has been spent in the Northern Beaches on road widening along Warringah Road and Mona Vale Road, but there has been no adequate compensation for the loss of biodiversity associated with these roadworks.
S222	O3	* Suggestion for Morgan Road and "The Bends" The best solution for both areas would be to create a bridge above the watercourse in both cases.
S255	O5	* the Parkway was built without foresight when the original path of Deep Creek was interrupted by road fill diverting the Creek's path to Narrabeen Lagoon and the ocean. Floods are now more likely because of the amount of construction and hard surface including the upgraded Warringah Road and the Northern Beaches Hospital site. Significantly more development is planned for Frenchs Forest if recent announcements are correct. The runoff is significant, and it is directed towards Deep Creek. The greater the development the more will be the runoff. If progress is inevitable then so too is the flooding.
S507	No selection	* The Parkway is a state road and as such the State Government should be taking on the work, rather than Council.

Table 28: Climate change - verbatim comments

Sub no	Option selected	Verbatim comments – Climate change
S4	O1	*None of the presented proposals will prevent ALL flood events along the Parkway, particularly if you take into account the increasing frequency of flood events we are now seeing due to climate change, all over the world.
S5	O1	* Yianni Mentis should outline what environmental and climate change impacts are predicted to impact flooding of the parkway in the future. Is climate change envisaged to lead to an increased probability of flooding?
S6	O1	* Get the people on those fantastic B-line buses. They need to get in touch with nature and the fact that there are consequences to the warming of the climate.
S7	O1	* None of the presented proposals will prevent ALL flood events along the Parkway, particularly if you take into account the increasing frequency of flood events predicted due to Climate Change.

Sub no	Option selected	Verbatim comments – Climate change
S8	O1	* None of the presented proposals will prevent ALL flood events along the Parkway, particularly if you take into account the increasing frequency of flood events predicted due to Climate Change.
S9	O1	* The data collected from this will surely be of great value for the future, as more severe storm events are predicted to come along with increasing climate change and biodiversity protection will be more and more important.
S10	O1	* None of the presented proposals will prevent ALL flood events along the Parkway, particularly if you take into account the increasing frequency of flood events predicted due to Climate Change.
S14	O1	* None of the options are really a long term solution - especially since they do not appear to take into account the probability of increased rainfall due to climate change. For reference just look at the flooding that has occurred in Germany, Belgium and The Netherlands in July 2021 - all made worse by climate change. We can expect the same occurrence here.
S16	O1	* Given sea level rises by the end of this century are predicted to be somewhere between 40 and 80 cm (ref: https://www.climate.gov/news-features/understanding-climate/climate-change-global-sea-level) these proposals will create significant environmental damage and not really solve the problem.
S26	O1	* We need to be looking at broader options that focus on the greater global environmental issues.
S28	O1	* Whilst there is inconvenience from flooding the importance of having a small natural floodplain ecosystem should not be overlooked. It provides a possibility for more deeply understanding the mechanisms of drought and flooding in a world of climate change.
S29	O1	* We are all aware of the challenges of the future. Whether we like it or not, we will have to get to 1) Zero Carbon Emissions and to 2) Preserving Biodiversity. Both of these aims or needs require rethinking of our way we are living. Driving cars, even if it is an electric vehicle, is not the transport solution for the future. With this in mind, we should plan our infrastructure for the future. We must make active and public transport more attractive and not lure people to stick to their cars. If we would do the more effective flood proofing of the Parkway, we not only facilitate car driving but also demonstrate our disregard for the need to protect biodiversity, by allowing over 2.5 ha of trees/ bush and habitat being cut down and disturbing sediments which will be flushed into Narrabeen Lagoon, which is our lagoon with the highest scoring quality. Not only would we demonstrate our resistance to change to other priorities in transport facilitation but we would also eradicate one of the last small floodplains in our LGA in existence.
S38	O1	* The Climate Emergency will also affect the water situation in the Parkway and must be taken into account for the longer term. Trees are essential infrastructure, to ameliorate the impacts of climate change at a local level. With the increasing loss of trees on private land on the northern beaches, it is very important that trees on public land are protected.
S45	O1	* Moreover, the dredging of sediments, the destruction of natural wetlands, and the removal of bushland and trees will release CO2 and other Greenhouse Gases and negatively impact the global climate.
S56	O1	* None of the presented proposals will prevent ALL flood events along the Parkway, particularly if you take into account the increasing frequency of flood events predicted due to Climate Change.
S59	O1	* The minor benefits in all the options do not justify the financial or environmental cost, particularly as we are likely to experience more intense, wetter East Coast Low storms due to climate change.
S62	O1	* None of the presented proposals will prevent ALL flood events along the Parkway, particularly if you take into account the increasing frequency of flood events predicted due to Climate Change.

Sub no	Option selected	Verbatim comments – Climate change
S64	O1	<p>* In Narrabeen Catchment, the solutions you have proposed are cr*p. You are asking us to choose between equally cr*p solutions that are cheap, nasty, ineffective and will ultimately not be sufficient for forthcoming future climate change issues (or even current issues).</p> <p>* None of the presented proposals will prevent ALL flood events along the Parkway, particularly if you take into account the increasing frequency of flood events predicted due to Climate Change.</p>
S88	O1	<p>* We should plan for more floods. The impact of climate change has already brought us heavier rainfall, more rainfall and flooding</p>
S94	O1	<p>* Also, the plants and trees have an important role in keeping the temperature on the northern beaches at a liveable level (Australia is already prone to very hot summers). Climate change and global warming- this is not wise.</p>
S123	O1	<p>* At the same time, consideration should be made for the future effects of climate change (eg sea level rise; increasing rainfall) and the road built accordingly now, not in another 10 years when the changes cause more flooding.</p>
S133	O1	<p>* Alternately, as suggested by the Pittwater Natural Heritage Association, elevation of the road, bridges and underpasses would seem a better option in view of future flooding due to climate change.</p>
S136	O1	<p>* It appears B3 is the preferred options due to ability to get to 1 yr event (which is also limited by Oxford Falls options to 1yr even) but no mention of climate change and potential impacts on how events will be affected. This is a major gap and MUST be considered for realistic decision-making and cost-benefit analysis.</p> <p>* With climate change we should expect longer dry periods but then more intense flooding - how the options handle this is not discussed. This is poor as remediation post extreme floods needs to be factored in.</p>
S153	O1	<p>* So DO NOTHING is the only option until Transport for NSW comes to its senses and acknowledges the effects of climate change and over development on the Northern Beaches.</p>
S157	O1	<p>* Wake up, climate change is real and destroying bushland for a bandaid solution that doesn't work won't fix the problem</p>
S203	O1	<p>* The dredging of sediments, the destruction of natural wetlands, and the removal of bushland and trees will release CO2 and other Greenhouse Gases and negatively impact the global climate.</p> <p>The Council has declared a Climate Emergency , and Pittwater Canopy Keepers supports the Council to act in accordance with this declaration and protect ecological assets. These assets can be understood as valuable infrastructure for buffering against climate disasters and sequestering emissions. Wetlands in particular are known to be some of our most important carbon sinks.</p>
S205	O1	<p>* The Flood Mitigation Options will not eliminate flooding; The Parkway is still likely to flood during large storm events. The frequency of these incidents is likely to increase over the years with climate change. "The present study has not taken account of climate change (potential increase in rainfall intensity) or sea level rise."</p>
S258	O5	<p>* None of the presented proposals will prevent all flood events along the Parkway, particularly if you take into account the increasing frequency of serious storms and flood events predicted due to Climate Change.</p>
S276	O5	<p>* Considering the highly likely climate changes that we expect it seems imperative that Option 5 must be adopted.</p>
S287	O5	<p>* The biggest challenge facing this or any solution is the impact of further climate change & in fact the inherent inaccuracies in predicting flood and afflux levels anyway and therefore number of times the road will be cut.</p>
S306	O5	<p>* If the country is serious about zero carbon emissions, then passive transport needs to become the norm. After the initial capital outlay, a cycle lane is cheap to maintain.</p>
S365	O5	<p>* With climate change and more severe weather most likely, an increase in flooding frequency is likely as well. If the project is to proceed then best to make it as floodproof as possible.</p>

Sub no	Option selected	Verbatim comments – Climate change
S443	O5	* Are these flood and road closure predictions based on historic data or do they incorporate the predictions of increased severe storm activity due to climate change?
S471	O5	* This will always be an issue into the future, the cost of doing nothing I believe will be higher i.e increased diversion, increased greenhouses gases due to diversions, future rainfall will also become increasingly erratic and more frequent due to climate change
S507	No selection	* Particularly due to the loss of Mona Vale Hospital as a fully working hospital facility, northern beaches residents need a permanent solution to flooding on The Parkway that takes in the effects of climate change.
S510	No selection	* None of the presented proposals will prevent ALL flood events along the Parkway, particularly if you take into account the increasing frequency of serious storms and flood events predicted due to Climate Change.
S515	No selection	* The planning must take climate change into account. Widened roads add to the 'heat island effect' and encourage any more cars onto the roads when we should be encouraging more reliance on passive transport and improved reliable public transport.
S516	No selection	(* This response is made as a private citizen living in Fairlight and as a user of the Wakehurst Parkway to travel to various commitments across the Northern Beaches. I make my response based on a 30+ year career as a research scientist, national environmental liaison officer for a national NGO, fulltime consultant to a former Federal Environment Minister, then 20+ years as a partner in a successful small environmental consultancy business specialising in bringing together diverse interests involved in projects requiring sustainable outcomes. Nine years as a Manly Councillor, during which I chaired both the Land Use Management Committee and the Sustainability Committee added to my knowledge and understanding of Local Government and its interaction with State and Federal governments.) * Climate change Limiting the Mitigation Feasibility Study to flood protection options "up to 1-in-2 years" is inadequate. While this may represent a reduction in an average over time, "at present" road closures due to flooding occur "up to six or seven times per year on average" and this can only be expected to increase in the face of climate change. It is of major consequence that the Mitigation Feasibility Study "has not taken account of climate change (potential increase in rainfall intensity) or sea level rise" – both of which are widely projected for the Sydney region, with an increase in major event frequency apparently already occurring.
S523	No selection	* None of the presented proposals will prevent ALL flood events along the Parkway, particularly if you take into account the increasing frequency of flood events predicted due to Climate Change.

Table 29: More information about options needed - verbatim comments

Sub no	Option selected	Verbatim comments - more information about options needed
S5	O1	* Council should be honest and forthcoming what the drivers for this undertaking are.
S40	O1	* I believe the environmental and economic costs of permanently flood-proofing the road ought to be revealed and discussed before any decisions are made. The public deserves to know the cost of doing the flood proofing PROPERLY.
S56	O1	* The public deserves to know the cost of doing the flood proofing PROPERLY.
S86	O1	* I would like an historical perspective on flooding - if flooding is a usual regular event it should not altered to limit that. If it good for the health of the creek system leading into Narrabeen lake that there be regular water flows (ie floods) then the impact on the environment should be nil.

Sub no	Option selected	Verbatim comments - more information about options needed
S96	O1	* The ongoing effectiveness of the options also appear not to be addressed, at least in the summary table. What is the maintenance regime and costs? What is the likely 'life span' of the sediment removal - will this need to be repeated every 5 years? 10 years? No construction works delivers a project without an operational/maintenance cost. Why is this not in the summary?
S116	O1	* More transparency is required.
S123	O1	* It is not clear in this website, who will oversee/perform the work. It should be undertaken by the NSW state government, who have more experience with such major roadwork. The proposed options (that will actually give a useful reduction in flood risk) entail large levels of environmental damage that can't be justified.
S131	O1	* Information should be provided to the public explaining why other potentially more costly solutions have not been considered, eg, elevating the road or building a bridge over flood prone sections rather than disturbing sediment and habitat for endangered species and communities. The public deserves to see the costings and details of an environmentally sensitive upgrade and RMS should be providing funds for this to happen
S133	O1	* You say any of the options 2-5 would cause significant environmental damage. I believe the community needs this information in order to make a considered evaluation.
S145	O1	* Please reveal the environmental damage in detail and the costs of providing a solution that doesn't harm the environment. otherwise how can the community make an informed decision??? * The public deserves to know the cost of doing the flood proofing PROPERLY.
S157	O1	* What are the actual economic and environmental costs? Stop hiding information from people who don't know to ask for it * The public deserves to know the cost of doing the flood proofing PROPERLY.
S198	O1	* Where is the estimated economic impact per closure for a proper assessment to be made?
S203	O1	* The estimated cost of decontamination is not available for the public to review.
S205	O1	*Bridges "The raising of The Parkway in key locations and corresponding culvert upgrades appeared to provide a longer-term sustainable option". This option has not been pursued due to the "significant capital cost and likely environmental impacts". However, no details have been provided. As a consequence the feasibility of a low cost, low impact bridge has not been ruled out.
S210	O2	* B2 is probably the most pragmatic option, however, it is difficult to assess the impact options given that there are up to 15 impacts listed, but the report itself notes that more research is required, and the impacts are going to be larger than those stated. Without those assessments, even B1 is a difficult option to support.
S247	O4	* A topographical map of the model and works would assist in presenting.
S340	O5	* The number and identification of invasive and noxious weed species should be provided so that people with little knowledge about flora can see the pros vs the cons of the options. I know of 3 just off the top of my head - Lantana, Morning Glory and Privet but realise there are many more and removal of these whilst doing works would be a good thing!
S374	O5	* do you have any visual images of the final look /outcome? * will there be greater access provided to this natural resource on completion?
S411	O5	* Option 5 is clearly the preferred Option however: - it is unclear what is intended in relation to the Causeway on Oxford Falls Road west. The two additional culverts on on the Parkway (south of Oxford Falls Road west) will simply increase the amount of water at that location. Please indicate what is intended at the causeway;

Sub no	Option selected	Verbatim comments - more information about options needed
S503	No selection	* The public deserves to know the cost of doing the flood proofing PROPERLY.
S510	No selection	* We do not support any of the current proposals for reducing flooding along The Parkway because we have not been supplied with any information about the costs and impacts of working on the road itself – either raising the level of the carriageway, or providing bridges at critical points. * There is no discussion of other solutions to the flooding issues - such as raising the road or building bridges at critical points. The RMS has studied some of those solutions and concluded that they are too expensive but there is no mention of them in the current list of options. The public deserves to know the cost of doing the flood proofing PROPERLY.
S516	No selection	(* This response is made as a private citizen living in Fairlight and as a user of the Wakehurst Parkway to travel to various commitments across the Northern Beaches. I make my response based on a 30+ year career as a research scientist, national environmental liaison officer for a national NGO, fulltime consultant to a former Federal Environment Minister, then 20+ years as a partner in a successful small environmental consultancy business specialising in bringing together diverse interests involved in projects requiring sustainable outcomes. Nine years as a Manly Councillor, during which I chaired both the Land Use Management Committee and the Sustainability Committee added to my knowledge and understanding of Local Government and its interaction with State and Federal governments.) * The community is being asked to provide feedback on a limited series of flood mitigation options, all but one of which are deemed 'feasible' "subject to acceptance of environmental impacts and the perceived or actual cost/benefit". However, the 'residual risks' (summarised on p.7 of the Mitigation Feasibility Study) are numerous and of considerable concern which has not been addressed.
S523	No selection	* The public deserves to know the cost of doing the flood proofing PROPERLY.

Table 30: Cultural heritage - verbatim comments

Sub no	Option selected	Verbatim comments – cultural heritage
S4	O1	* Very few - if any -cities are fortunate enough to have such a large area of ancient, indigenous vegetation in such relatively pristine condition in the midst of a large city of five million people. It should not be damaged any further.
S8	O1	* Very few - if any -cities are fortunate enough to have such a large area of ancient, indigenous vegetation in such relatively pristine condition in the midst of a large city of five million people. It should not be damaged any further.
S10	O1	* Very few - if any -cities are fortunate enough to have such a large area of ancient, indigenous vegetation in such relatively pristine condition in the midst of a large city of five million people. It should not be damaged any further.
S58 / S208	O1	* As some of the land is owned by the Metropolitan Local Aboriginal Land Council, it and indigenous custodians of the land must be consulted and their views taken into account.
S73	O1	* The inconvenience of the parkway closing 6-7 times per year is very minor compared to the loss of wildlife, natural habitats, and Indigenous land lost due to the upgrades
S110	O1	* The potential impact upon Local Aboriginal artefacts may be discovered – especially along freshwater sources such as Middle Creek and negotiations with adjacent landowners, such as the Local Aboriginal Land Council, must consider the immediate impact the project will have on adjacent lands.

Sub no	Option selected	Verbatim comments – cultural heritage
S203	O1	* The area's indigenous heritage is significant, and it is unclear from the proposal what the effects of the described options will be for this heritage.
S244	O4	* Endure protection of aboriginal sites
S350	O5	* I'd like to make sure this won't damage the local ecology, flora & fauna or any areas of Indigenous significance, but otherwise give it my full support.
S387	O5	* However we need to take care of native flora and fauna in the area and make every effort to protect local indigenous heritage sites too.
S503	No selection	* The road should be elevated by bridges so that indigenous species can move from one ecosystem to the next ecosystem, otherwise disconnection occurs and native species become extinct.
S514	No selection	* Environmentalists and other residents value the bushland and creeks surrounding this road for the wildlife habitat they provide, Aboriginal sites and their natural beauty. * Neither has a full survey of Aboriginal sites been carried out (although 58 are already known) and some could be at risk.

Table 31: Social and economic - verbatim comments

Sub no	Option selected	Verbatim comments – social and economic
S1	O1	* the Parkway provides one of the most beautiful entry points to the unique environment of Pittwater.
S5	O1	*My background: I travelled the parkway on most work days. Since Covid I travel it up and down twice per week. * How has COVID affected the traffic on the parkway. Can an increase in working from home be seen in less cars? Can a more flexible work schedule enable residents to work from home during a closure of the parkway?
S16	O1	*Covid has demonstrated that most residents on the northern beaches can work from home when needed. When the Parkway floods working from home should become mandatory for those who can and the rest will need to use alternate routes
S24	O1	* With people able to work from home I don't think closures are such an inconvenience as they once were.
S28	O1	* In addition through recognising it's unique contribution to our ecosystem and through further research and community involvement we can learn how to better achieve a balance between competing needs. The current pandemic has shown us how important the diminishing natural environment is for mental health and we want to be able to retain the highest quality environment in our region. * I regularly bicycle in that area and I greatly appreciate the beauty of the bush and do not want to see it destroyed.
S36	O1	* The Parkway is an iconic road in Sydney. People all over Sydney love it and always remember it for the way it is. It's one of Sydney best roads for a scenic drive.
S44	O1	* I live close to The Parkway. I drive along it. I would also like to cycle, walk and jog on it. However, it is not possible to walk, jog or cycle on this road. Walking and jogging are prohibited. Cycling is dangerous. What is the point of a road if you cannot use it? The Parkway is such a road. It is a useless road because you cannot walk, jog or cycle on it. This problem needs to be fixed so that The Parkway is turned into a useful road that allows people and goods to move between different parts of Sydney.

Sub no	Option selected	Verbatim comments – social and economic
S49	O1	* This is one of the most scenic drives on the northern beaches It does not need further development for little to no impact.
S53	O1	* used to live in belrose and have lots of friends in narrabeen that i visit still regulary. personally i think its a beautiful road with lovely bushland around which makes it such a beautiful drive. seems a shame to lose the trees around it!
S61	O1	* From my point of view, the improvements don't seem to be significant enough compared to the costs, ecological damages due to excavation and clearing, and the length of time of traffic disruptions. * Moreover, people and families have been using the area for recreation and exercise for a while and we are not sure how that would change the character of the area and even whether the ecology would recover after. Moreover, there are alternative roads like Mona Vale road which is being widened and already has significant ecological impacts on its own, and Warringah road which has a tunnel built to improve traffic.
S63	O1	* I don't see the need to destroy such a beautiful area.
S65	O1	* the Parkway is a unique area in the sprawling and over-developed Sydney metropolitan area. Let's keep it that way.
S73	O1	* Additionally, the roadworks would be a huge obstruction to the daily commute for Northern Beaches residents, who prioritise less traffic, smaller roads, and beautiful scenery.
S75	O1	* Do nothing. It is a beautiful part of our northern beaches. A place for our next generation to breath in fresh air and enjoy life
S77	O1	* I strongly believe you should adopt option 1 and do nothing it's a beautiful balanced ecosystem and also a beautiful road to drive along, we don't need to go disrupting it because of naturally occurring flood water 6-8 times a year.
S80	O1	* This road is a pleasure to use and the character and environment would be adversely affected by any significant works.
S94	O1	* Not worth doing any damage to this beautiful strip so close to Narrabeen lake. * Therefore instead of cutting it down we need to consider a lifestyle shift towards working around the natural environment. It is part of life that occasionally this road floods. The song that you can "be in paradise and put up a parking lot" resonates. Especially post COVID-19, people would choose to work from home and stay indoors on a rainy day anyway, avoiding the need to use this road.
S99	O1	* We don't want to turn our beautiful northern beaches into the treeless western suburbs.
S102	O1	* The parkway is a beautiful entrance to the beautiful Northern beaches. All my visiting friends comment that it is a beautiful way to arrive at your destination,-in the heart of suburbia.
S107	O1	* The Parkway is a beautiful and unique stretch of road through bushland and the lake .
S111	O1	* I enjoy the natural environment of the Northern Beaches. * I would like my son to also grow up with the same natural surroundings.
S127	O1	* The Parkway is just what it says; a wonderful Park of Peace, Beauty and teaming wildlife.
S143	O1	* This is the only physically attractive bushy road in the Northern Beaches area. We all enjoy the beauty and relaxation every time we drive on it. It would be vandalism to make any changes. Leave the beauty alone for us and future generations!
S178	O1	* THE ENVIRONMENTAL DAMAGE TO A UNIQUE SCENIC ROADWAY WILL BE ENORMOUS WITH MINIMAL BENEFIT * ONCE MONA VALE ROAD IS COMPLETED THERE WILL BE EVEN LESS NEED FOR A LANDSCAPE SCARRING SOLUTION TO THE PARKWAY FLOODING.
S179	O1	* We have responsibility to keep the area in its unique state- such a beautiful tract of land. Once you change water courses the land is never the same.
S181	O1	* Inconvenient as the flooding is, I would be sad to see any significant clearing done As it is such a beautiful drive.

Sub no	Option selected	Verbatim comments – social and economic
S185	O1	* Future generations will be eternally grateful for the legacy of retaining the unique unspoilt natural environment of The Parkway.
S192	O1	* With more and more people taking on flexible working, and this route not being the only route out of the beaches for northern residents, it seems that it is overkill to spend this much money on addressing these flood issues. Not everything needs 'fixing'.
S211	O2	* Increased work from home also has reduced the traffic volume using the parkway.
S217	O3	* It is a beautiful road which I do not want to see turned into a concrete highway. I do not want to see another "Mona Vale Rd" which is now an ugly scar across the landscape.
S234	O3	* Best value for money
S235	O3	* Option 3 at cost of 7m p, resulting in two closures per year, seems reasonable as long as the work can be completed with minimal impact on traffic movements during peak hours. I do not live in the immediate area and would differ my view in favour of those directly impacted by the proposed works.
S237	O3	* If this option is \$10,000,000 cheaper and there is only one extra closure per year save the money
S238	O3	* Seems best cost benefit ratio
S239	O3	* Maximum impact for the money spent
S256	O5	* The best option is to have the Parkway open more often than not, the communities should not have to take alternative routes when the Parkway floods. The reasons are for economical, social and health reasons.
S261	O5	* The Wakehurst Parkway needs to be double lanes both ways with a bike lane added in -both ways.
S273	O5	* There appears to be a fair amount of work done in researching the options and environmental impacts. Option 5 promises to give the best result in terms of reducing amount of time the Parkway is closed due to flooding. All options will have some environmental impacts but it's important that the option chosen achieves the best cost/benefit result and from what I can see, that is option 5.
S279	O5	* I believe the job should be done once and done properly. The inconvenience to the public will be great, but it just has to be done.
S288	O5	* We need to get on with it. For too long we have been suffering the uncertainty of access during weather events. It is too important given the increase population planned for the peninsular.
S291 / S381	O5	* Needs to be done now and not a part fix that has to be upgraded in the future
S298	O5	* Many are moving here for the natural beauty and relaxed lifestyle but are not willing to sacrifice the natural beauty because of small and relatively short inconveniences. It is a pity they do not just visit then return to their convenient lifestyles.
S299	O5	*Supportive of Option 5. Maintaining a continuous traffic flow while work is being carried out is important. Our church operates Monday - Friday 9-5pm for approximately 120 staff and Bible college students on site at 2 Dreadnought Rd, Oxford Falls. In addition we have church services on Sundays from 8am, 10am and 6pm. Many of our congregation, staff and students travel from Narrabeen and north to our Oxford Falls site so it will be important that works don't disrupt traffic flow. There are no backstreets to take detours around the road work sites. Can work be done at night?
S300	O5	* This is my preferred option as it will give the most protection against future flooding.
S301	O5	* I think this is the best long term option
S302	O5	* Option 5 seem to be the most cost effective for maximum reduction in flooding frequency. Eventually the Parkway will have to be widened to 4 lanes and option 5 will give the best base for these future works.

Sub no	Option selected	Verbatim comments – social and economic
S306	O5	<p>* The parkway needs to be improved for cyclists. This is the perfect route for cyclists from the northern beaches to NB Hospital, forest way, Seaforth, Mosman and the city. This route is ideal because it is shaded, less polluted, nice grades and flats and minimal side streets. This upgrade will attract cycle groups away from the congested traffic on Pittwater Rd and link the North Shore to popular destinations via McCarrs Creek Rd.</p> <p>The reason it is not currently popular is that the shoulder is too narrow and is not maintained so cyclists are constantly avoiding glass, sticks, sand rocks and car parts, it is dangerous. The other obstacle is the narrow bridge at Deep Creek which is terrifying.</p> <p>To encourage passive transport and cycle visits, we need a 3m shoulder in each direction and a second bridge built at deep creek. One for vehicles heading south and one for vehicles heading north.</p>
S307	O5	<p>* The community needs this completed asap. The congestion on the other roads when the Parkway is closed is frustrating!</p> <p>This has been talked about for so long. Just do it. Many thanks from a life long resident.</p>
S310	O5	<p>* As per your introduction, The Parkway is one of the main road connections on the Northern Beaches passing through Narrabeen, Oxford Falls, Frenchs Forest, and North Balgowlah. It is imperative that the works are done to minimise road closures in the future due to flooding. Doing options 1-4 now will just result in further and more expensive works needing to be done in the future.</p>
S312	O5	<p>* Yes it is the most expensive solution but we will benefit from this long solution.</p>
S319	O5	<p>* It was always obvious that it would be necessary to upgrade The Parkway when planning to build the Northern Beaches Hospital at FRENCHS FOREST. I am surprised & disgusted that it wasn't part of that project. It is common sense.</p> <p>* The Parkway is a very busy & dangerous road. It is a main road & I think should be a divided road, however all that is on offer now, is some flood mitigation so yes, let us do the best we can to stop the road being closed due of flooding.</p>
S323	O5	<p>* Everything possible must be done to ensure it can perform its function. Even one closure per 2 years is unacceptable but if the funding is there to make major improvements such as option 5 that must be undertaken as soon as possible</p>
S325	O5	<p>* Option 5 looks to be the best way to deal with it, or a suspended road would solve the issue but I understand the cost would be unrealistic.</p>
S327	O5	<p>*In the difference between 4 and 5. 5 is much more effective for less that twice the cost. The lower cost options will more than likely need renewing and therefore end up costing as much if not more than 5.</p>
S328	O5	<p>*Option 1 is not a reasonable approach.</p> <p>The difference in costs between Options 5 and other options is not significant and would be more than compensated for by reducing the impact on the community. Option 5 should be pursued. Carpe Diem!</p>
S330	O5	<p>* This is one of the main connecting roads for the northern beaches for all traffic and affects congestion for many miles around when it is closed. I believe the matter needs to be resolved urgently.</p>
S332	O5	<p>* This option5 has almost as much impact as option 4, but with twice the benefit, for only a small increase in cost. It seems like a no brainer, given that the other options will not give much relief from flooding, and will take almost as long to complete. In the near future, option 5 will be well worth the effort, especially given that NBC has recently begun implementing our "Flood Plan " plans and impacts on local housing etc.</p> <p>We in the NBC area need to finally move into the 21st century re our roads!!</p>
S333	O5	<p>* Such a pivotal travel route. Every closure causes carnage on all other roads, the economic cost of every closure is significant, loss of wages & cost to employers and most importantly the impact on emergency services ability to service our area.</p>
S334	O5	<p>* I travel up to 4 trips a day on the Parkway. Closures cause significant delay and disruption. Notification is not live causing more delay and disruption. The alternative routes are gridlocked by 730am.</p>

Sub no	Option selected	Verbatim comments – social and economic
S335	O5	* Very simple. Why muck around with half measures. Get it done once and for all. Traffic is not going to lessen from the peninsula in coming years.
S339	O5	* While a significant cost, it is the most proactive from a long-term perspective.
S343	O5	* We should do as much as possible to keep this road open.
S346	O5	* Spend the money and do it already.
S349	O5	* Better to do it once rather than piece meal.
S350	O5	* This is a vital transit link and any closure has negative impact on all others in the road network, but especially local families who travel on it daily.
S351	O5	* If we are to fix this problem lets do it properly the 1st time
S354	O5	* I am sure the engineers can come up with a way to strengthen these and support the roadway on them. Also make it wide enough for the transport and allow for a cycle way as well. Sometime there will have to be a plan for a wider roadway as the traffic will increase if a tunnel at Seaforth is built.
S362	O5	* I think option 5 is best as it seems that public construction is often minimized. This causes multiple fixes in the future at increased cost.
S363	O5	* If we're going to spend money and do a job, lets do it properly and for the long term. Yes, it's more money but it will be money well spent - unlike so many other initiatives that are a waste of time and money.
S367	O5	* The issue needs to be addressed and I think you need to go for it and sort the problem out in one hit
S373	O5	* Why wouldn't council consider extending the shoulder of the road to allow for bike lanes in Wakehurst parkway too ? Bike riders use this road often .
S374	O5	* improvements need to be done and it would appear the preferred outlined is effective.
S375	O5	* The Parkway needs to be fixed properly and immediately
S378	O5	* Oxford Falls Grammar School staff and students travelling to school along the Parkway are severely impacted each time a closure occurs. The proposal outlined in Option 5 that would reduce flood events resulting in closure of the Parkway to a 1 in 2 year timeframe would be appreciated by the school community using this important route to Oxford Falls Grammar School.
S380	O5	* It is important to keep the Parkway open at all times whether flood, fire or other emergency. *Do it now or pay a greater economic and environment price later.
S383	O5	* I'm use that road a few time a day to take my kids to Oxford fall grammars the traffic are very bad and dangerous
S384	O5	* The Parkway needs to be upgraded to 2021 standards.
S385	O5	* We need to maximise road access with minimum environmental damage.
S387	O5	* We need to get this done now and spend the money to do this remediation work properly.
S389	O5	* Critical infrastructure such as this should have the appropriate material investment.
S393	O5	* Much more effective
S395	O5	* If we are going to do something lets do it properly. If we take the easy approach now it will only come back to bite us in the future. :Let's future proof the Parkway as a priority to ensure whenever someone needs to get to the hospital they can!
S397	O5	* This s the best option even if it's the most expensive
S398	O5	* Fix it properly the first time, and the marginal cost over next best option is worth it.
S404	O5	* Dont screw around. Get it done and do it right so you dont need to spend more money in the future
S405	O5	* This issue will only compound over time with increased users on the road and lead to potentially worse environmental impacts down the line if not done.
S406	O5	* I believe if you are going to take the time to decrease flooding you should do the best option possible. It is not increasing traffic flow along the road, simply improving safety and upgrading to what would be standard if the road was built now.

Sub no	Option selected	Verbatim comments – social and economic
S407	O5	* The roads need more planning like this to open up our community. Access to the hospital for residents of the north and a bus system needs to be planned through this area to take the congestion away from Pittwater Rd. The significant upgrade is needed to cope with the expansion of the population in the area.
S408	O5	* The reality is the road has needed upgrading for decades. * The closures due to flooding are crazy. Things have to change and I support any upgrading, but if you are going to do it - do it properly!!!
S412	O5	* The regular flooding and closure of the Parkway goes back much further than my 20 years in Collaroy. * Let's not do an immediately cheaper option now which will require future remediation. Let's fix the problem now to the fullest extent physically possible!
S413 / S500	O5	* The best option is the last one option 5 as if it keeps closing like it's doing these days for sometimes four to five days straight, is very inconvenient to locals like myself whom only live one street away from the Parkway. * It's just stupid not to get the flooding situation fixed up soon as possible. * Just letting you know my opinion for the Parkway Flood plan, that option 5 is by far the best plan in finally fixing up the flood issue.
S415	O5	* If adopted, the parkway should be fixed properly the first time and no half measures.
S417	O5	* Having lived north of the Parkway since 1998 I have noted more and more traffic over the years. More recently there is a greater increase in heavy duty traffic such as gravel trucks and busses and very much of the road north of Warringah Rd needs full resurfacing and not the patch work currently in place. Flood lock-outs create absolute havoc for peak commuters heading south and this requires a proper fix, not just a "band-aid" approach.
S418	O5	* Apart from solving the flooding problem it will make the parkway safer in heavy rain.
S420	O5	* noting that there are areas to be considered in the next step, I believe that a significant change is required to ensure the passage along The Parkway
S424 / S498	O5	* As a resident at *** Whale Beach the Parkway is THE access road I think flooding stopping traffic every 3-6 months is not acceptable
S425	O5	* In view of the growing importance of the Parkway and apparently meagre cost to benefit ratio I am surprised this was not undertaken long ago.
S430	O5	* If it isn't done fully now, the cost of doing less now and more later will be greater. So do the best job now and minimise environmental damage and identify issues that are probably there and will come to light eventually.
S431	O5	* The more long term permanent solution the better
S433	O5	*Spend the \$17M now. Other options are bandaids.
S436	O5	* I don't want a band aid solution, I want a permanent solution that will save lives of humans (enabling cars and ambulances to use The Parkway during torrential rain) not possums, reeds or frogs.
S438	O5	* Strongly support improvement to the Parkway. Reduced flooding is important and also duplicating the Wakehurst to allow better traffic flow.
S439	O5	* Every time the road closes the cost is enormous, financially, time wise and could prove fatal if ambulance delayed. Rain events are increasing therefore the road should be lifted above flood level.
S441	O5	*Option 5 would seem the minimum extent of work to provide any meaningful change to the existing road flooding
S444	O5	* If Council is going to the trouble of rectifying the flooding issue on The Parkway, it would make sense to maximise the effectiveness of the works while all the machinery and workers are on site, rather than having to return at a later date costing rate payers extra money.
S447	O5	* The improvement of The Parkway so it can stay open during heavy rain is long overdue. Too many residents are inconvenienced by the road closure during heavy rain. It should be fixed
S449	O5	* Dredge and drain it now. Stop fluffing around.

Sub no	Option selected	Verbatim comments – social and economic
S453	O5	* The effectiveness of Option 5 speaks for itself. Eight times more effective as option 2 for four times the cost and twice as effective as option 4 for around a 30% increase in cost. This new council area deserves the best solution for what has been a very long term problem.
S455	O5	* It is important to keep this road open
S457	O5	* In the great scheme of things, the environmental impact is vanishingly small. Just get on with it. *And bizarre that one of the options should be to do nothing!
S458	O5	* Option 5 is less than 4 times the cost of Option 2 but it is 8 times more effective.
S459	O5	* Maximum resolution requested
S462	O5	* this work is essential and urgent.
S463	O5	* It is essential that this road is kept open and therefore Option 5 is the sensible choice, especially as funds are available. * The project must be carried out with all speed as it has already been ignored for too long.
S467	O5	*The option of having only "one" flood event very 2 years is more far more attractive. The community has been affected for a very long time with this situation and with lost productivity. As the flooding currently interrupts private & public transport with increased travel time for commuters, energy used to travel further to be able to arrive at work or school on time. This has an knock on effect for other driving routes making them more congested during these flood events. * This is certainly a more effective option in my view.
S470	O5	* Option to provide best traffic route unaffected by flooding is best for local residents and Northern beaches residents.
S473	O5	* This is a major road to the Northern Beaches northern most suburbs so the less flooding the better!
S474	O5	* As one of three access roads to and from the northern beaches this road needs to remain open for as much time as possible. Every time the Parkway closes the other access roads become even more congested than normal resulting in gridlock. Many times I've had to return home due to being stuck in traffic for over 60 minutes and not even left the northern beaches.
S476	O5	* Option 5 seems to me the most effective and cost-effective way forward.
S477	O5	* I believe Option 5 is the right solution. The less closures we have the better for everyone concerned. This is long long overdue.
S480	O5	* This is an important cycling corridor. Can you please advise what consideration has been given to cyclists during the construction phase and to improving cycling safety with the completed project?
S481	O5	* Do it once and do it as well as it can be.
S482	O5	* Road closures have a major impact so should be minimized.
S483	O5	* Do it correctly the first time. * Much better to spend money now with low interest rates and it will benefit everyone in the future .
S484	O5	* It is also an issue for anyone trying to get to work. When we have consistent heavy rain, which is often, the Parkway is always closed. This is third world and the people on the Northern Beaches deserve better.
S487	O5	* spend up big This is long overdue
S488	O5	* option 5, we have waited long enough. Let us do it properlz now for a change!
S495	O5	* other options not worthwhile
S496	O5	* Look the best bang for the buck. The road is a major route that is used by a lot of traffic, and if they are serious regarding the spit tunnel it make sense to have this road open as much as possible.
S497	O5	* Essential
S501	O5	* Would strongly support Option 5 as being the most cost effective.

Sub no	Option selected	Verbatim comments – social and economic
S509	No selection	* It is so special driving thought that bush land and lake
S511	No selection	* I have lived in this area for more than 40 years and have always found the drive along Wakehurst Parkway an uplifting experience, especially in the evening twilight returning from work from the city area.
S515	No selection	* Do not let this happen to the beautiful environmentally valuable existing bushland of Wakehurst Parkway. Preserve this special 'country' road into the future with a view to ameliorate some of the terrifying results of climate chaos. Please take heed of what we've just witnessed in Germany and recently around the globe. * Wakehurst Parkway should be well maintained in its original form but restricted to walking, bicycles and perhaps (electrc) motorcycles which would have a better result in protecting dwindling local flora and fauna and remain as an important 'lung' for the northern beaches.
S518	No selection	* May I suggest with the small amount of money provided the Oxford Falls section should be completed first as it could be fully completed with funds currently available. With what left over commence doing the flood mitigation at the Academy of Sport Intersection section.

Table 32: Miscellaneous - verbatim comments

Sub no	Option selected	Verbatim comments - miscellaneous
S33	O1	* Educate the public to travel on public transport covid safe is best. Avalon likes to think that there are still some environmentally moral decisions made by council. * Too many vicious dogs because some people feel as if its there right to have vicious dogs as personal protection in a place over run by city folk coming in at night and causing problems. But this is not really fact. Keeping the area secure at night during the storm is a very good idea. It has worked in the past and with the right road warnings will do so in the future in the area north of Mona Vale, Warriewood to Palm Beach.
S58 / S208	O1	* I have lived near to, or travelled regularly through the Parkway for the past 60 years.
S98 / S201	O1	* reduce the rates
S117 / S148	O1	* Thanks to the staff at Narrabeen scout hall. The costs of doing anything appear to outweigh the results.
S127	O1	* On top of that: Instead of people thinking how can I get quickly to a hospital, how about visualising a life where one lives healthy and happy, never needing to visit a hospital in the first place..... win... win... Situation. Thank you 😊🙌
S132	O1	* Saying that, I appreciate the consultation process and the detailed options even though I know that sooner or later the trucks and bulldozers will start their destructive dances...
S158	O1	* I don't think anything should be done.
S178	O1	* THE ACCESS TO THE PARKWAY FROM NORTH NARRABEEN IS SO POOR THAT IT IS CURRENTLY QUICKER AT MOST TIMES OF DAY TO GO UP MONA VALE ROAD. DO ANY COUNCIL REPRESENTATIVES OR STAFF TRY AND ACCESS THE PARKWAY FROM THE NORTH DURING MORNING PEAK HOUR OR SCHOOL ZONE TIMES??????
S532	O1	* I do wish Council would stop asking rate payers to decide between complex technical solutions for issues relating to the environment of the Northern Beaches. The average ratepayer does not have the expertise to make an intelligent judgement based on the scant evidence usually presented by Council in these cases. Approximately four years ago Council developed three complex options relating to the dredging of Narrabeen Lagoon and asked ratepayers to vote on the option preferred. Residents did not have the technical expertise to make that choice and the voting

Sub no	Option selected	Verbatim comments - miscellaneous
		tended to be on emotional lines – was the concept of dredging something that was acceptable to the individual – or not? Few people were capable of assessing the options and the result was a tied vote. Council took the view that none of the options should be pursued – and the lagoon has been abandoned, allowing it to become increasingly shallow and further degraded.
S210	O2	*S1 is completely unnecessary, given Table 1 spells out that the "flooding" is at worst a 23cm, 1-in-2 year event, and that level of flooding poses a low risk, and even then only to small, compact vehicles. * I'm opposed to both O1 and O2, as they are also largely unnecessary, and seems to be really only for those, Hillsong, the school and those who use Oxford Falls Road W to access the Parkway.
S219	O3	* Thank you for the opportunity to have input to the options to reduce flooding on The Parkway. * My thoughts are that Option 3 B2 + O1 is the preferred option as it seems sensible to upgrade existing culverts, make a new levee bank and remove 1 metre of sediment upstream of the bends. The cost of \$7m seems better value than Option 2. Having road closures x 2 average / year seems a better option than the current average of x 4 / year. However, I also feel that Option 4 B3 + O1 at \$13.3m resulting in x1 closure / year, may be worth the money, but as these projects very often result in unexpected complications and usually end up costing a great deal more, I am reluctant to make this option. I do not see that Option 5 has any real benefits to the major traffic movement on The Parkway.
S221	O3	*With this action an evaluation of what road closures may be and allow further assessments made if needed.
S222	O3	* As the suggested plans indicate, building a small wall on either side of the road and increasing the size of the culverts will allow for the water to disperse into Middle Creek. I agree with this as a solution as it will stop the water build-up on the road.
S226	O3	* Accepting of the fact that some work done on it would go a long way, hence my choice of option 3. * Thankyou for your time in this debate.
S229	O3	* Even with the most expensive option, the road will be flooded at times.
S243	O4	* Last option seems overkill given still has closure risk
S246	O4	* Something should have been done 40 years ago.
S264	O5	* This is a major problem for residents leaving only 2 ways out of the area. I support the maximum that can be done to solve this problem permanently. Traffic on the beaches is bad enough as it is
S281	O5	* Spend more money and do a better job.
S285	O5	* I agree that we complete the work in option 5 . Lets do the works once, so that the mitigation does not need to be repeated year after year. I understand that the finances are available to complete this option
S293	O5	*If you do it, do it properly
S355	O5	* I prefer option 5.
S356	O5	* I support the most expensive options.
S358	O5	* Recommend Option 5 be commenced as soon as possible
S372	O5	*Stop talking and get on with it!
S374	O5	* currently cars park on verge which is hazard and it would be excellent if access could be incorporated along creek to connect with current Narrabeen lagoon walk.

Sub no	Option selected	Verbatim comments - miscellaneous
S388	O5	* Option 5 !!
S390	O5	* Do option 5 asap
S442	O5	*Do it once - get it right
S443	O5	* (As a general comment - tax payers and rate payers like solid, well-engineered and more permanent solutions as opposed to "band-aid solutions" that require multiple follow on fixes with a higher overall price tag). Be bold and courageous!
S445	O5	*Please complete this project as quickly as possible.
S451	O5	*I feel this is long overdue
S456	O5	*Best option
S468	O5	*Just get on with it!
S469	O5	* Seems to take an extremely long time to action. 4 years from Dec 2017 to late 2021 just for formal council approval & before works commence.
S471	O5	* get it done right would be my recommendation * good luck with this
S478	O5	* why not do the job properly the first time?
S486	O5	* If we are going to spend money on this (which we desperately need to) lets do it properly.
S514	No selection	* Thank you for the opportunity to comment on the Parkway Flood Mitigation feasibility study.
S516	No selection	* This response is made as a private citizen living in Fairlight and as a user of the Wakehurst Parkway to travel to various commitments across the Northern Beaches. I make my response based on a 30+ year career as a research scientist, national environmental liaison officer for a national NGO, fulltime consultant to a former Federal Environment Minister, then 20+ years as a partner in a successful small environmental consultancy business specialising in bringing together diverse interests involved in projects requiring sustainable outcomes. Nine years as a Manly Councillor, during which I chaired both the Land Use Management Committee and the Sustainability Committee added to my knowledge and understanding of Local Government and its interaction with State and Federal governments.
S517	No selection	* Please look at the highlighted part in the attached screen grab, and then fix it quickly, before anybody else notices. ratepayer and mathematician. <i>Highlighted in attachment "At least two closures on average per year"</i>

Appendix B – RAW DATA

The information in Appendix B represents the raw data as received by Council. Each response was assigned its own identifying number. Note that while the response numbers total 532, there were a few people who made more than one submission. Where this has been identified, these have been classified as one response. The total number of respondents is 512. All personal details have been deleted or redacted. The responses have been arranged in option order from option 1 through to option 5 (although this is not replicated in the raw data).

S1	<p>Increased housing and road development Increased housing and road development in the northern beaches LGA is having a profound affect on the natural environment of the area. The Wakehurst Parkway provides one of the most beautiful entry points to the unique environment of Pittwater. The potential desecration of this area to provide year round road access is yet another tragic example of how our human society continues to overrule the significance and need to preserve the natural world.</p> <p>The value of bio diversity and natural beauty cannot be underestimated in a future beset by wicked problems where human beings will need to be resilient to survive and thrive. Unlike many places in the world we still have a rich bio- diversity. To not place this front and centre of NBC's decisions and to not protect the inherent value of these places to the very best of our ability is to act as vandals. Please find alternate and low impact ways to improve existing infrastructure and leave the beauty of the Parkway for the inhabitants and those who drive through it . Being unable to access a road 5-7 times a year is hardly a disaster; especially as there are other roads off the peninsula. Lets spend our revenue in ways that promote other key priorities for the area. Please don't destroy the Parkway.</p>
S2	<p>None of the alternatives really fix the problem. The Parkway will still flood so its a waste of public money We need to preserve the bushland along the bends and near the Sports Academy</p>
S3	<p>Please don't destroy the bushland. We have lost so much bushland along the Parkway</p>
S4	<p>ALL of these proposals involve serious environmental disturbance including</p> <p>a) removal or damage to large areas of bushland communities - these are the 'green lungs' of the Northern Beaches and an iconic and treasured feature of the district. Very few - if any -cities are fortunate enough to have such a large area of ancient, indigenous vegetation in such relatively pristine condition in the midst of a large city of five million people. It should not be damaged any further.</p> <p>b) exposing contaminated sediments that would need to be treated (and the cost of de-contaminating those sediments is not revealed)</p> <p>There is no discussion of other solutions to the flooding issues - such as raising the road or building bridges at critical points. The RMS has studied some of those solutions and concluded that they are too expensive but there is no mention of them in the current list of options. The public deserves to know the cost of doing good quality, low-environmental impact flood proofing.</p> <p>9. If the road were elevated by bridges, native fauna could move through underneath. The road needs to be redesigned to allow for animals to move safely from one area of bushland to another. None of the presented proposals will prevent ALL flood events along the Wakehurst Parkway, particularly if you take into account the increasing frequency of flood events we are now seeing due to climate change, all over the world.</p> <p>The Northern Beaches Council has been requested to provide solutions that involve damage and destruction of the surrounding bushland - letting the RMS off the hook from having to do anything about the road itself. It is a State Government responsibility.</p> <p>It is the alignment of the road that has caused the modification of the surrounding environment that now causes the flooding. It is the road that needs to be modified not the surrounding environment. It is not a satisfactory process to ask the public to choose between bad solutions and worse solutions without revealing the costs and the environmental impacts of a good or better solution.</p>

S5	<p>My background: I travelled the parkway on most work days. Since Covid I travel it up and down twice per week.</p> <p>I think the council has not really outlined why a closure of 6-7 times per annum is in need of a fix. (at least not on this website or the presentation they provided.)</p> <p>I would agree that some parts of the road require a new decking but a closure of 6-7 timer per year seems perfectly reasonable.</p> <p>The environmental impacts to gain 3-4 days seem excessive and do not warrant the cost or risk of upsetting the flora and fauna.</p> <p>Council should be honest and forthcoming what the drivers for this undertaking are.</p> <p>How has COVID affected the traffic on the parkway. Can an increase in working from home be seen in less cars?</p> <p>Can a more flexible work schedule enable residents to work from home during a closure of the parkway?</p> <p>Has the council being pressured to ensure the emergency corridor to Northern Beaches Hospital is usable at all times?</p> <p>Yianni Mentis should outline what environmental and climate change impacts are predicted to impact flooding of the parkway in the future. Is climate change envisaged to lead to an increased probability of flooding?</p> <p>Thank you.</p>
S6	<p>I thoroughly disagree with any possible degradation of the beautiful bush land and riparian environments surrounding the Wakehurst Parkway. There are not only the known animal and plant species and communities at risk but effects on fish life has not even been estimated!</p> <p>Get the people on those fantastic B-line buses. They need to get in touch with nature and the fact that there are consequences to the warming of the climate.</p>
S7	<p>None of the presented proposals will prevent ALL flood events along the Wakehurst Parkway, particularly if you take into account the increasing frequency of flood events predicted due to Climate Change.</p> <p>Fixing the flooding will cause more damage to the natural environment - I'd rather put up wit the floods!</p> <p>"Fixing" the local bushland is NOT the solution. The ROAD should be fixed. I know this is outside of Council's scope, but that is no reason to destroy more of the bush because RMS / state / TfNSW is unable to fulfill its obligations</p> <p>It is the alignment of the road that has caused the modification of the surrounding environment that now causes the flooding. It is the road that needs to be modified not the surrounding environment.</p> <p>Trying to "fix" the bush to fix local flooding will likely only shift the problem. Also, the flooding already occurs at several different locations along the Wakehurst Parkway.</p> <p>ALL the given proposals involve serious environmental disturbance including removal of bushland. OTHER SOLUTIONS - including road drainage should be considered regardless of monetary cost. Other costs are too high.</p> <p>Please, put ecological well being above human convenience and financila cost benefit analysis</p>
S8	<ol style="list-style-type: none"> 1. None of the presented proposals will prevent ALL flood events along the Wakehurst Parkway, particularly if you take into account the increasing frequency of flood events predicted due to Climate Change. 2. In common parlance, the proposals are "Band-aid Solutions" that fit within the given budget provided by the Roads and Maritime Services (RMS) for now. 3. Wakehurst Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a crucial link that needs to be properly funded by State Government. 4. The Council has been requested to provide solutions that involve using the surrounding bushland - letting the RMS off the hook from having to do anything about the road itself. 5. The RMS may say that the water comes from the surrounding environment and that the administrators of the bushland must solve the problems but actually, it is the alignment of the road that has caused the modification of the surrounding environment that now causes the flooding. It is the road that needs to be modified not the surrounding environment.

	<p>6. The flooding occurs at several different locations along the Wakehurst Parkway.</p> <p>7. ALL the given proposals involve serious environmental disturbance including</p> <p>a) removal of large areas of bushland and</p> <p>b) exposing contaminated sediments that would need to be treated (and the cost of de-contaminating those sediments is not revealed)</p> <p>8. There is no discussion of other solutions to the flooding issues - such as raising the road or building bridges at critical points. The RMS has studied some of those solutions and concluded that they are too expensive but there is no mention of them in the current list of options. The public deserves to know the cost of doing the flood proofing PROPERLY.</p> <p>9. If the road were elevated by bridges, animals could move through underneath. The road needs to be redesigned to allow for animals to move safely from one area of bushland to another.</p> <p>10. It is not a satisfactory process to ask the public to choose between bad solutions and worse solutions without revealing the costs and the environmental impacts of a good or better solution.</p>
S9	<p>***** members include residents from the far north to the far south of the Northern Beaches. All of our members are most familiar with the Wakehurst Parkway flooding situation and whilst we find it inconvenient, it is a situation we have grown to accept.</p> <p>We all love the natural feeling of the Wakehurst Parkway and know about the rich biodiversity of endemic flora and fauna, endangered ecological communities and the less welcome weeds in certain areas.</p> <p>We are all aware of the challenges of the future. Whether we like it or not, we will have to get to 1) Zero Carbon Emissions and to 2) Preserving Biodiversity.</p> <p>Both of these aims or needs require rethinking of our way we are living. Driving cars, even if it is an electric vehicle, is not the transport solution for the future.</p> <p>With this in mind, we should plan our infrastructure for the future. We must make active and public transport more attractive and not lure people to stick to their cars.</p> <p>If we would do the more effective flood proofing of the Wakehurst Parkway, we not only facilitate car driving but also demonstrate our disregard for the need to protect biodiversity, by allowing over 2.5 ha of trees/ bush and habitat being cut down and disturbing sediments which will be flushed into Narrabeen Lagoon, which is our lagoon with the highest scoring quality. Not only would we demonstrate our resistance to change to other priorities in transport facilitation but we would also eradicate one of the last small floodplains in our LGA in existence.</p> <p>Floodplains provide multiple ecosystem services and are hotspots of biodiversity.</p> <p>-Let's keep our mini floodplain and restore its function to act as a sponge with bush regeneration.</p> <p>-Additionally we should ensure the remaining sponge function of the upper catchment is preserved so as to not worsen the existing flooding situation. This is done best by protection of all remaining bushland.</p> <p>And for a proper alternative approach to decrease the flooding we support the following:</p> <p>-Ensure best data of flooding extent are accurate and continue monitoring flooding.</p> <p>-Restore degraded bushland or replant cleared land in the upper catchment eg around Oxford Falls and measure the extent of decline in flooding. This will not fasten the drying out of the floodplain, as would the proposed removal of vegetation and sediment, but provide a slower and more moderate amount of water for a longer period flowing or trickling down into it and keeping it moist in draughts.</p> <p>The data collected from this will surely be of great value for the future, as more severe storm events are predicted to come along with increasing climate change and biodiversity protection will be more and more important.</p> <p>For \$18 million certainly some privately owned land could be bought and even community involving restoration projects could be facilitated.</p> <p>This way the flood mitigation project could achieve</p> <ul style="list-style-type: none"> - controlled measurements for flood mitigation from landrestoration. - community activation through involvement in many phases of the project (weeding, planting, monitoring) - preserve the character of our most iconic road of the Northern Beaches (after we already lost Mona Vale Road and the last remains of French's forest along Warringah Road)

	<p>- restore habitat in one of our ideally suited landscapes to accommodate highest biodiversity. - be an inspiration and a hope for finding ways to an equitable future. - become a model for learning that is easily accessible.</p> <p>For these reasons and also the added financial aspect, we request that none of the suggested flood mitigation projects go ahead, but instead an alternative project as suggested be contemplated.</p>
S10	<p>1. None of the presented proposals will prevent ALL flood events along the Wakehurst Parkway, particularly if you take into account the increasing frequency of flood events predicted due to Climate Change.</p> <p>2. The proposals are "Band-aid Solutions" that fit within the given budget provided by the Roads and Maritime Services (RMS) for now.</p> <p>3. Wakehurst Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a crucial link that needs to be properly funded by State Government.</p> <p>4. The Council has been requested to provide solutions that involve using the surrounding bushland - this essentially lets RMS off the hook from having to do anything about the road itself.</p> <p>5. The RMS may say that the water comes from the surrounding environment and that the administrators of the bushland must solve the problems but actually, it is the alignment of the road that has caused the modification of the surrounding environment that now causes the flooding. It is the road that needs to be modified not the surrounding environment.</p> <p>6. The flooding occurs at several different locations along the Wakehurst Parkway.</p> <p>7. ALL the given proposals involve serious environmental disturbance including a) removal of large areas of bushland and b) exposing contaminated sediments that would need to be treated (and the cost of de-contaminating those sediments is not revealed)</p> <p>8. There is no discussion of other solutions to the flooding issues - such as raising the road or building bridges at critical points. The RMS has studied some of those solutions and concluded that they are too expensive but there is no mention of them in the current list of options. The public deserves to know the cost of doing the flood proofing PROPERLY.</p> <p>9. If the road were elevated by bridges, animals could move safely from one area of bushland to another.</p> <p>10. It is not a satisfactory process to ask the public to choose between bad solutions and worse solutions without revealing the costs and the environmental impacts of a good or better solution.</p>
S11	<p>It seems unnecessary to implement any flood mitigation proposals outlined by the the draft proposals. There are numerous environmental impacts resulting from any of the intervention options, intended to avoid what can only be considered marginal or negligible benefits to those impacted by road closures.</p>
S12	<p>Dear Sir/Madam,</p> <p>I object to all the options B5, B2 + O1, B3 + O1, B3 + O2 + S1. All of these options are inadequate, partial solutions to the problem, and will inevitably inflict serious and irreversible damage on the Narrabeen Lagoon, its Catchment, and the Garigal National Park.</p> <p>The solutions and funding needed to construct bridges and actually fix the flooding issue are not being offered. All the options given are second-rate, partial, non-solutions. It is completely unfair to expect local Council to foot the bill for the development of the Wakehurst Parkway, which is a State road. It was the State government that closed down Mona Vale hospital, making the Northern Beaches population reliant on the unreliable Wakehurst Parkway for hospital access. This was evidently a bad idea in the first place, and the State government needs to foot the bill to make up for it, and to assuage the vulnerability it has created. As a Northern Beaches resident and rate-payer, I object to the options and funding avenues described in this proposal.</p> <p>All the options described in this proposal will inflict irreparable damage on the ecosystems in and around Narrabeen Lagoon, with far-reaching and unpredictable ramifications for the biodiversity of the area. Not least because of the proposed exposure and release of contaminated sediments into the environment.</p> <p>Let me remind you that these ecosystems - fringing the Lagoon and surrounding the Parkway - are</p>

	<p>some of the most biodiverse ecosystems in the entire Greater Sydney area. They provide habitat for nationally threatened species including Southern Brown Bandicoot, Spot-tailed Quoll, Giant Burrowing Frog, Swift Parrot, and Australian Little Bittern, as well as numerous NSW threatened species including Powerful Owl, Masked Owl, Barking Owl, Red-crowned Toadlet, Black Bittern, Glossy Black-Cockatoo, Squirrel Glider, Koala, and many others. As you know, the ecological communities that will be impacted by the described proposals - i.e. Swamp Sclerophyll Wetlands, Freshwater Wetlands, Swamp Oak Floodplains, and Coastal Saltmarsh - are threatened communities. Please recognise that the exposure of contaminated sediments, the building of embankments to obstruct and redirect water courses, and extensive land clearing will impact these precious local ecosystems in ways that cannot be holistically understood. Moreover, the dredging of sediments, the destruction of natural wetlands, and the removal of bushland and trees will release CO2 and other Greenhouse Gases and negatively impact the global climate.</p> <p>I implore you to reject the current proposals. It is simply not a satisfactory process to ask the public to choose between bad options and worse options without revealing the true fiscal and ecological costs of these options. Come back to us when you have enough money to build proper bridges or, better yet, to revitalise Mona Vale hospital so we can increase the resilience of the local community and can afford to leave the Narrabeen Lagoon catchment in relative peace.</p>
S13	<p>Let's keep Wakehurst Parkway, its fauna and biodiversity, like the beautiful bush land it is today. With Mona Vale Road upgrade we have already destroyed parts of nature that makes this area so special.</p>
S14	<p>My reasons for selecting the do nothing option are:</p> <ol style="list-style-type: none"> 1. None of the options are really a long term solution - especially since they do not appear to take into account the probability of increased rainfall due to climate change. For reference just look at the flooding that has occurred in Germany. Belgium and The Netherlands in July 2021 - all made worse by climate change. We can expect the same occurrence here. 2. The report outlines the significant amounts of acid sulfate soils and silt contaminated with heavy metals. Even with the best will in the world, disturbing those soils will lead to dangerous pollution entering Narrabeen Lagoon and having an unfavorable impact on the animals and plants that live in and around the lagoon. 3. The Council and RMS should go back and provide options that permanently flood proof the road - not just a band aid solution for 1-2 year protection 4. Any work should be funded entirely by the State Government - The State Govt put the hospital at the end of the Wakehurst Parkway - they should fund any upgrades to the Parkway so that people can get to the hospital without being flooded out.
S15	<p>I am opposed to the proposals put forward to mitigate flooding along the Wakehurst Parkway because:</p> <ol style="list-style-type: none"> 1. there is insufficient funding to both safeguard damage to the environment. Fix/elevate the road properly and leave the floodplain alone 2. When the road is closed due to flooding (most times ambulances can get through) there is access to the hospital etc via Powder Works Rd and Mona Vale Rd
S16	<p>I do not like any of these proposals. Given sea level rises by the end of this century are predicted to be somewhere between 40 and 80 cm (ref: https://www.climate.gov/news-features/understanding-climate/climate-change-global-sea-level) these proposals will create significant environmental damage and not really solve the problem. Covid has demonstrated that most residents on the northern beaches can work from home when needed. When the Parkway floods working from home should become mandatory for those who can and the rest will need to use alternate routes. The money would be better spent renovating the upstream environment to slow the flow of water and putting in better public transport options. Flying cars are probably not that far away anyway. To really fix the problem the road level would need to be raised about 1 metre.</p>
S17	<p>We do not need more environmental damage alongside the wakehurst parkway. If this preferred plan occurs it would be disastrous for the surrounding ecosystems, where threatened species such as Prostanthera marifolia inhabit. The beaches to city link is another thing to consider in this matter, as the combination of flood mitigation and the beaches link tunnel construction would have a severe detrimental impact on the ecosystems surrounding the parkway. I would much prefer road closures</p>

	over the environmental destruction that would take place with these flood mitigation measures put into action.
S18	I always feel that we get it wrong whenever we try to fight against nature - we end up spending more and more money fighting a battle we can never win. Better to let nature take her course and recognise that she's the boss and we need to work with her.
S19	I wish to preserve the lagoon area in its current beautiful state.
S20	None of the other options provided are sufficient to save the ecology of the area sufficiently well. Far more money is required to enable better less invasive options.
S21	Wakehurst Parkway presents a unique and beautiful floodplain area with biodiversity that MUST be preserved for the future. An increase in vehicle use should not be encouraged. The current major upgrades to Mona Vale Road are more than enough to allow traffic to flow from the peninsula and back.
S22	Having read the documents and especially the assessment of ecological impacts, it is clear that none of the Options 2-5 is acceptable. The area has threatened ecological communities and exceptional ecological value. No offset could ever justify the destruction of 3 ha of valuable ecological assets. And as per the outline - all Options (2-5) have similar negative ecological impacts. We urge council to preserve these precious ecological communities and our environmental assets. All suggested options are contrary to the stated objective in the council's strategic plan regarding the preservation of our precious bush for future generations. The only acceptable option is Option 1: Do nothing
S23	For all options other than option 1 the environmental impact is too great for the limited reduction of road closures.
S24	I think we should be preserving the Bush land we have and the Mona Vale Road upgrade provides alternative access. With people able to work from home I don't think closures are such an inconvenience as they once were.
S25	The nature normally provides a eco system and works as a sponge for floods. If we destroy the ecosystem more and more it won't be long term solution. The only long term solution would be more focused environmentally friendly restriction to avoid any extreme floods or heat waves.
S26	We need to be looking at broader options that focus on the greater global environmental issues. Attacking and upsetting amazing biodiversity in plants and animals is certainly not the answer. I have been are resident here for over 35 years and while the flooding is a disruption, it is a far less worry than heavy handed quick fix solutions to ruin the beauty and function of the Wakehurst Parkway. A review of the reduction in natural spaces within Warringah will show you that we are fast losing habitat and flora diversity. We need to think smarter and deeper to these issues.
S27	This is a submission from the ***** The ***** group is actively involved in the protection, propagation and promotion of our endemic local flora and Australian flora where appropriate. The Wakehurst Parkway, that lovely road through the bush to the top of the Northern Beaches, is very familiar to all of us and the flooding of it is equally well known. The richness of flora species along the Parkway indicates several different ecological communities, with some of them known to be endangered. The flood-prone area as such is equally rather uncommon, as most of our natural swamp lands have been filled in, mostly by being used as tips. We strongly oppose the clearing of over 2.5 ha of native vegetation to remove the sediment in order to increase faster drainage within the lower Middle Creek basin. We recognise the inconvenience of the occasional flooding of the Parkway but the protection of our environment, especially within such a biodiverse location, clearly deserves priority. We think restoration and regeneration, rather than than the removal of bush, could provide equally good results in regards to flood mitigation. Council should use the allocated money to test flood mitigation through vegetation restoration and implement all necessary monitoring to contribute in a scientific way to alternative flood mitigation.

	<p>We hope further that the upgraded Mona Vale Road will provide quick and easy alternative access to Northern Beaches Hospital and that the Parkway does not have to be relied on at times of flooding.</p>
S28	<p>The current floodplain is unique and provides many possibilities for biodiversity and enhancement of the local bush land for plants and animals.</p> <p>Whilst there is inconvenience from flooding the importance of having a small natural floodplain ecosystem should not be overlooked.</p> <p>It provides a possibility for more deeply understanding the mechanisms of drought and flooding In a world of climate change.</p> <p>In addition through recognising it's unique contribution to our ecosystem and through further research and community involvement we can learn how to better achieve a balance between competing needs.</p> <p>The current pandemic has shown us how important the diminishing natural environment is for mental health and we want to be able to retain the highest quality environment in our region.</p> <p>I regularly bicycle in that area and I greatly appreciate the beauty of the bush and do not want to see it destroyed.</p>
S29	<p>This is a submission on behalf of ****.</p> <p>Our members include residents from as far north as Avalon and reach down to Manly.</p> <p>All of our members are most familiar with the Wakehurst Parkway flooding situation and whilst we find it inconvenient, it is a situation we have grown to accept.</p> <p>We all love the natural feeling of the Wakehurst Parkway and know about the rich biodiversity of endemic flora and fauna, endangered ecological communities and the less welcome weeds in certain areas.</p> <p>We are all aware of the challenges of the future. Whether we like it or not, we will have to get to 1) Zero Carbon Emissions and to 2) Preserving Biodiversity.</p> <p>Both of these aims or needs require rethinking of our way we are living. Driving cars, even if it is an electric vehicle, is not the transport solution for the future.</p> <p>With this in mind, we should plan our infrastructure for the future. We must make active and public transport more attractive and not lure people to stick to their cars.</p> <p>If we would do the more effective flood proofing of the Wakehurst Parkway, we not only facilitate car driving but also demonstrate our disregard for the need to protect biodiversity, by allowing over 2.5 ha of trees/ bush and habitat being cut down and disturbing sediments which will be flushed into Narrabeen Lagoon, which is our lagoon with the highest scoring quality. Not only would we demonstrate our resistance to change to other priorities in transport facilitation but we would also eradicate one of the last small floodplains in our LGA in existence.</p> <p>Floodplains provide multiple ecosystem services and are hotspots of biodiversity.</p> <p>-Let's keep our mini floodplain and restore its function to act as a sponge with bush regeneration.</p> <p>-Additionally we should ensure the remaining sponge function of the upper catchment is preserved so as to not worsen the existing flooding situation. This is done best by protection of all remaining bushland.</p> <p>And for a proper alternative approach to decrease the flooding we support the following:</p> <p>-Ensure best data of flooding extent are accurate and continue monitoring flooding.</p> <p>-Restore degraded bushland or replant cleared land in the upper catchment eg around Oxford Falls and measure the extent of decline in flooding. This will not fasten the drying out of the floodplain, as would the proposed removal of vegetation and sediment, but provide a slower and more moderate amount of water for a longer period flowing or trickling down into it and keeping it moist in draughts.</p> <p>The data collected from this will surely be of great value for the future, as more severe storm events are predicted to come along with increasing climate change and biodiversity protection will be more and more important.</p> <p>For \$18 million certainly some privately owned land could be bought and even community involving restoration projects could be facilitated.</p> <p>This way the flood mitigation project could achieve</p> <ul style="list-style-type: none"> - controlled measurements for flood mitigation from landrestoration. - community activation through involvement in many phases of the project (weeding, planting, monitoring)

	<ul style="list-style-type: none"> - preserve the character of our most iconic road of the Northern Beaches (after we already lost Mona Vale Road and the last remains of French's forest along Warringah Road) - restore habitat in one of our ideally suited landscapes to accommodate highest biodiversity. - be an inspiration and a hope for finding ways to an equitable future. - become a model for learning that is easily accessible. <p>For these reasons and also the added financial aspect, we request that none of the suggested flood mitigation projects go ahead, but instead an alternative project as suggested be contemplated.</p>
S30	You much environmental degradation and even after spending all the money it does not totally eliminate road closures.
S31	Not worth the environmental degradation. Users simply travel via alternate routes.
S32	None of the offered solutions provide for the environment or a proper solution to flooding
S33	Educate the public to travel on public transport covid safe is best. Avalon likes to think that there are still some environmentally moral decisions made by council. All our wet lands have been filled in its absolutely disgusting what PREVIOUS councils have done to the environment and this one has already plans to increase damage to what is left. Too many vicious dogs because some people feel as if its there right to have vicious dogs as personal protection in a place over run by city folk coming in at night and causing problems. But this is not really fact. Keeping the area secure at night during the storm is a very good idea. It has worked in the past and with the right road warnings will do so in the future in the area north of Mona Vale, Warriewood to Palm Beach.
S34	I do not want any destruction of the bush area of the bends or lower creek area next to the Lagoon. These areas are already damaged by weeds and have been helped by recent bush regeneration. Occasional flooding reflects the removal of bush upstream as much as the road. Removal of further vegetation and the flood plain area will Sørensen the speed of run off. Minor changes to the Oxford Falls end would be possible, but that is not an option given - so do nothing.
S35	The bushland is vital to matintaining the biodiversity of the local area. It is important we consider conserving the bushland where possible. The road could be developed to include some raised areas in the most flood prone parts.
S36	Wakehurst Parkway is an iconic road in Sydney. People all over Sydney love it and always remember it for the way it is. It's one of Sydney best roads for a scenic drive. To help reduce road closure and flooding, the road could simply be raise in low lying sections. This would not only improve the road usability during flooding but also allow for wildlife to cross under.
S37	<p>Please see my comments attached. Northern Beaches Council Proposal for Flood Proofing Wakehurst Parkway</p> <p>I do not support any of the current options for reducing flooding along The Wakehurst Parkway. I have read the proposal and attended the information evening run by council and do not feel that any of the proposals given will reduce flooding on the roadway to a satisfactory degree.</p> <p>My objections are as follows:</p> <p>Council should not be responsible for what is an RMS issue. Council manages some of the land beside the road but are not responsible for the road.</p> <p>The budget given to carry out what is really, just remediation work, is miniscule compared to what needs to be spent on a roadway in environmentally sensitive lands.</p> <p>Siltation to the creek has been exacerbated by development further up the creek, allowed to occur by the State Government. The State Government should be responsible for funding flood proofing the Wakehurst Parkway.</p> <p>Initial road works on the Wakehurst Parkway have rerouted a natural watercourse exacerbating flooding west of the Fitness Camp. The silt removal from this area as suggested by one of the proposals will have a negative environmental impact on the area. Some areas under investigation by council contain threatened ecological communities. The creek line should be restored to its former shape. Specialists in creek restoration should be engaged.</p> <p>We are living in incredibly challenging times in regards our weather, and further weather modelling should be required regarding the increase in major flooding events along the Parkway before any changes take place to the road.</p>

	<p>More detailed options needed to be designed including the potential to build low lying bridges above the wetlands.</p> <p>The Wakehurst Parkway has a variety of environmental habitats along its length that need to be looked after and the proposals before us now do not consider these habitats highly enough or give accurate costings of the environmental and building works proposed. Apart from the option to do nothing, they are all band aid options with a life of approx. 20 years.</p> <p>We should be smarter than this and look at inviting specialists involved at building roadways through environmentally sensitive lands to build a throughfare that will see us well into the future</p>
S38	<p>Thanks for the opportunity to comment, because when looking at the options, it appears that the state government has not provided the northern beaches council with enough funding to fulfil what is actually a state govt responsibility – the provision of key infrastructure, crucial link roads. None of these proposals will prevent all flood events, when they are occurring at several different locations along the Wakehurst Parkway.</p> <p>I’m strongly opposed to any action being taken and support the DO NOTHING proposal, because the reality is that the retention of all the remaining forest in the Parkway is an essential requirement for the healthy survival of the lagoon.</p> <p>One of the reasons given by State Planning Minister Stokes for amalgamating the 3 councils was to preserve the integrity of Narrabeen Lagoon, so that the catchment’s protection was optimised by unified management in a bigger council. Yet here we are, facing the prospect of damaging roadworks through the catchment, plus the likelihood of 3 hectares of pristine bushland being lost. Council must go back to the state government and ask for a properly funded solution that raises the road without destroying the forest. The cumulative impact of tree loss must be taken into account when the other end of the Parkway is expected to be losing thousands of trees to the Northconnex Tunnel Project as well.</p> <p>The need for this expensive flood mitigation work is a consequence of the state government’s decision to close Mona Vale Hospital, requiring Pittwater and Narrabeen ward residents to make a ridiculously long journey in a medical emergency. Let’s not exacerbate the state government’s poor planning decisions already impacting the ‘northern northern beaches’, by doing the state government’s dirty work - putting ecosystems at risk in the rich bushland corridor between French’s Forest and Narrabeen.</p> <p>The proposals all involve serious environmental disturbance, including the removal of large areas of dense bushland containing valuable ecosystems – such as the threatened ecological communities of Swamp Sclerophyll Wetlands, Freshwater Wetlands, Swamp Oak Floodplains, and Coastal Saltmarsh. Also some of the most biodiverse ecosystems in Greater Sydney, providing habitat for nationally threatened species including Southern Brown Bandicoot, Spot-tailed Quoll, Giant Burrowing Frog, Swift Parrot, and Australian Little Bittern, as well as numerous NSW threatened species including Powerful Owl, Masked Owl, Barking Owl, Red-crowned Toadlet, Black Bittern, Glossy Black-Cockatoo, Squirrel Glider and others.</p> <p>Clearly this road needs to become more environmentally sensitive, redesigned in order to accommodate the safe movement of wildlife from one area of bushland to another. The road must be elevated by bridges so that animals, like the wallabies often seen as corpses on the road, can move through passages underneath.</p> <p>It is the road that needs to be modified not the surrounding environment - yet no other solutions to the flooding issues - such as raising the road or building bridges at critical points have been provided. Alternatives looked at by the RMS are too expensive apparently. Surely the public deserves to know the actual cost of doing the flood proofing properly. Especially when the state govt housing strategy is determining population density increases will occur on the northern beaches. Real estate is booming - decent infrastructure must be provided.</p> <p>The environmental impacts and costs must be provided fully before any decisions are made and can be weighed up realistically in a public consultation or by council. Massive movement of soil and extensive groundwork will expose contaminated sediments, including benzene and lead, that will need to be treated. However, the cost of de-contaminating those sediments is not even included. The effects flowing from the removal of sediment, on the ecology and fish species in Middle Creek, with their potential to pollute the lagoon as well, have yet to be investigated.</p> <p>The Climate Emergency will also affect the water situation in the Parkway and must be taken into</p>

	account for the longer term. Trees are essential infrastructure, to ameliorate the impacts of climate change at a local level. With the increasing loss of trees on private land on the northern beaches, it is very important that trees on public land are protected. The Parkway is an iconic part of the northern beaches landscape, much valued for its scenery and lush biodiversity. Please refuse to oblige the state govt's shonky plan. None of these options are acceptable, so we call on you at this stage to DO NOTHING.
S39	I don't want to destroy ONE OF THE ONLY NATIVE WETLANDS IN THE AREA !!! WHAT ABOUT THE WILDLIFE ??
S40	Have provided in the file below. Options offered are sub standard and don't eradicate flooding of the Wakehurst. Cause environmental damage without the provision of a viable outcome. Alternative is having the State Government fund the fixing of the Wakehurst Parkway properly as it is a crucial link to the NBhospital. Need to invest in a proper works plan building bridges at critical flood points and provide wildlife tunnels to preserve the environment. Horrendous to propose the eradication of so much bushland. Fix the Road!
S41	I live in Mona Vale and commute to the city daily for work. I drive on the Wakehurst Parkway regularly. I honestly don't mind that the Parkway is closed a few times a year during heavy rain, I simply adjust my travel accordingly. I think the negative environmental impact of the work outweighs the benefit gained and I don't think anything needs to be done. I'm against the proposal.
S42	Do nothing, the other options are environmental disasters not options
S43	Leave it alone
S44	I support doing nothing and oppose doing anything ***until*** the Government gives the Citizens a full picture of all alternatives available. If the Government is unable to design suitable options, they should welcome suggestions from anyone who can work out how to fix the problem. The Government needs to give us the option to vote on proposals that will actually fix the problems without destroying this important part of our natural heritage. All options outlined here result in massive bush destruction and do not fix the problem of flooding. They are not proper options. I live close to Wakehurst Parkway. I drive along it. I would also like to cycle, walk and jog on it. However, it is not possible to walk, jog or cycle on this road. Walking and jogging are prohibited. Cycling is dangerous. What is the point of a road if you cannot use it? Wakehurst Parkway is such a road. It is a useless road because you cannot walk, jog or cycle on it. This problem needs to be fixed so that Wakehurst Parkway is turned into a useful road that allows people and goods to move between different parts of Sydney. Flooding is only one of the problems this road has and that is all that is addressed in these options. All the options available only partially fix the problem and they do so at great economic cost. It is nice that the Government has presented the costs for these options. We can all see that these are very low cost projects compared to the hundreds of billions of dollars that are being spent on infrastructure around the country. We can all see that for only a few tens of millions dollars more it should be possible to raise the entire road. In this way, the bushland can be saved, the bush can become a wildlife habitat with animals passing freely beneath it and pedestrians and cyclists can use the bottom section of the road safely without risk of death from speeding vehicles.
S45	Dear Sir/Madam, I object to all the options B5, B2 + O1, B3 + O1, B3 + O2 + S1. All of these options are inadequate, partial solutions to the problem, and will inevitably inflict serious and irreversible damage on the Narrabeen Lagoon, its Catchment, and the Garigal National Park. INADEQUACY The solutions and funding needed to construct bridges and actually fix the flooding issue are not being offered. All the options given are second-rate, partial, non-solutions. It is completely unfair to expect local Council to foot the bill for the development of the Wakehurst Parkway, which is a State

	<p>road. It was the State government that closed down Mona Vale hospital, making the Northern Beaches population reliant on the unreliable Wakehurst Parkway for hospital access. This was evidently a bad idea in the first place, and the State government needs to foot the bill to make up for it, and to assuage the vulnerability it has created. As a Northern Beaches resident and rate-payer, I object to the options and funding avenues described in this proposal.</p> <p>ECOLOGICAL DESTRUCTION</p> <p>All the options described in this proposal will inflict irreparable damage on the ecosystems in and around Narrabeen Lagoon, with far-reaching and unpredictable ramifications for the biodiversity of the area. Not least because of the proposed exposure and release of contaminated sediments into the environment.</p> <p>Let me remind you that these ecosystems - fringing the Lagoon and surrounding the Parkway - are some of the most biodiverse ecosystems in the entire Greater Sydney area. They provide habitat for nationally threatened species including Southern Brown Bandicoot, Spot-tailed Quoll, Giant Burrowing Frog, Swift Parrot, and Australian Little Bittern, as well as numerous NSW threatened species including Powerful Owl, Masked Owl, Barking Owl, Red-crowned Toadlet, Black Bittern, Glossy Black-Cockatoo, Squirrel Glider, Koala, and many others. As you know, the ecological communities that will be impacted by the described proposals - i.e. Swamp Sclerophyll Wetlands, Freshwater Wetlands, Swamp Oak Floodplains, and Coastal Saltmarsh - are threatened communities. Please recognise that the exposure of contaminated sediments, the building of embankments to obstruct and redirect water courses, and extensive land clearing will impact these precious local ecosystems in ways that cannot be holistically understood. Moreover, the dredging of sediments, the destruction of natural wetlands, and the removal of bushland and trees will release CO2 and other Greenhouse Gases and negatively impact the global climate.</p> <p>I implore you to reject the current proposals. It is simply not a satisfactory process to ask the public to choose between bad options and worse options without revealing the true fiscal and ecological costs of any of these options. Come back to us when you have enough money to build proper bridges or, better yet, to revitalise Mona Vale hospital so we can increase the resilience of the local community and can afford to leave the Narrabeen Lagoon catchment in relative peace.</p>
S46	<p>Use this road on daily commute (have done for 20 years) Impacted a handful of times However impacted daily by the poorly planned RH access from the north. Worse are the 1,000s heading S on Pittwater road who are held up by the RH turn lane spilling over.</p>
S47	<p>I believe the rare closures are fine and doesn't need a massive impact</p>
S48	<p>The risk of contamination of the lagoon is very high. The lagoon is used by thousands of people. The destruction of bush is not acceptable. This is not fixing the road that is the problem. It is a band aid to pacify some people. The loss of biodiversity will impact for decades. Where will the wildlife that live here be relocated. The council has said it has not done a project of this size and is looking forward to doing this but why do this at all?</p>
S49	<p>This is one of the most scenic drives on the northern beaches It does not need further development for little to no impact. Please spend the money putting real grass back on the ovals or improving walking tracks.</p>
S50	<p>This submission is on behalf of the *****. Our Association has been in existence for over 25yrs years with the aim to ensure appropriate development consistent with our natural bushland environment. Despite the issue of flooding on the Wakehurst Parkway, something which we are all familiar with, we are opposed to all of the flood mitigation proposals. None of the proposals "Flood Proof" the Parkway and as you state it would only be some mitigation of the worst events. We think the environmental value of the Parkway, its rich biodiversity of endemic flora and fauna and endangered ecological communities is far more valuable than the protection from flooding. We are also concerned that the increase in access to the Northern Beaches will only accelerate development of the area. All the proposals involve serious environmental disturbance including removal of large areas of bushland (over 2.5 hectares). Removal of the top soil in which the bushland is growing, would make ecosystem regeneration most difficult and the habitat loss for the time of construction and</p>

	<p>restoration works would stretch into many years. Some of the proposed removals are of threatened ecological communities so these proposals are absolutely not acceptable.</p> <p>Disturbing and exposing contaminated sediments would be a risk to the water quality in Narrabeen Lagoon, which is not acceptable, especially with Narrabeen Lagoon being most ecological valuable lagoon on the Northern Beaches.</p> <p>The removed sediments would need to be trucked out and treated and the cost of de-contaminating those sediments has not been revealed and costs could rise even further.</p> <p>We conclude: Continue with bushregeneration in the Middle Creek Corridor, support the native vegetation as it can suck up a lot of rainwater and act as a sponge and consider to acquire extra land in the Middle Creek corridor to plant out with indigenous vegetation to soak up even more water in high rainfall events.</p>
S51	<p>Enough is enough. Too much of the unique native bushland of the northern beaches has been lost. My suggestion is to increase the road height in areas that are affected by flooding.</p> <p>If you refuse to do this THEN I suggest...Do nothing.</p>
S52 / S377	<p>Comments received: 12/7/21 (S52)</p> <p>None of the above! This is a critical main road servicing a critical part of Sydney, with a considerable and growing residential and tourist population and community infrastructure, and which will soon be fed by increased traffic by the northern tunnel. It should be flood protected to at least a 1 in 20 year flood closure. With minimum impact to the local environment (flora, fauna and silt removal), the Parkway's low flood prone sections should be constructed to a low level, simple span, suspended floodway design. Yes, of course more costly than the 5 miserable over sensitive options offered, but a far superior long term solution, showing foresight and responsibility for the community both now and into the future. Gladys should have the final say she has vision!</p> <p>Comments received: 7/6/21 (S377)</p> <p>None of the above! Plan for the future! This is part of Sydney, not some backwater. This main arterial road should get a much better result than anything offered more like once in '20+' years, - a standard comparable to the northern beaches tunnel which will feed the Parkway.</p> <p>Yes, we all love our environment, it needs to be protected as much as 'possible/practical', but a city is where people live, and they deserve so much better than '1 closure every 2 years'. Especially wrt access to the Hospital, the city, commercial hubs, and the projected population growth (mandated and driven by government).</p> <p>"The road corridor is 'understood'? to be under RMS ownership? How will this project be funded? - State/RMS/TfNSW? or Local/ratepayers? Think of the future, think outside your elected term outside the box! Much to be said!</p>
S53	<p>used to live in belrose and have lots of friends in narrabeen that i visit still regulary. personally i think its a beautiful road with lovely bushland around which makes it such a beautiful drive. seems a shame to lose the trees around it!</p>
S54	<p>I do not support any of the proposed options. They guarantee environmental damage, for only a reduction in flooding. What is needed is flood proofing, by raising the road. I understand that road raising is not the responsibility of council, but of Transport NSW. It is not good enough for Transport NSW to just say that they have examined this option and are not proceeded further, therefore council must deal with it. The NSW government has record revenues from stamp duty from the housing boom in the state, they can afford to allocate funding for a road raising project.</p> <p>Simply promising environmental offsets to offset the guaranteed damage from the council's proposals is not acceptable. It is well known that the offsets system is a failure:</p> <ul style="list-style-type: none"> • https://www.google.com.au/amp/s/amp.theguardian.com/environment/2021/jun/25/nsw-inquiry-to-scrutinise-use-of-environmental-offsets • the land provided as offset is never equivalent to the land destroyed • the offset system has been found to be so likely to be corrupted that there is a current investigation underway (see article link above) • in practice offsets act to simply allow environmentally damaging development to proceed, whilst creating the appearance of mitigating the damage, without actually doing so
S55	<p>None of the proposals should be followed since only a partial resolution will be achieved at great financial and environmental cost. An alternative, minimal environmental impact solution would be to</p>

	<p>integrate into the roadway a lowlevel (say 60cm at highest point above road) steel bridge over the flood zone so that floodwaters can run underneath .I think the gradient of the road would allow this. The bridge could be built off site in sections to be assembled on site at times causing minimal traffic disruption, one lane of the road at a time. Clearly the current road surface would need engineering to integrate and support the bridge but bigger jobs have been done without intolerable inconvenience.. Also the lanes could be widened by cantilevering the edges of the bridge.Also, little animals could cross under the bridge. Not a tree need be lost for a 100% effective solution.</p>
S56	<p>My preference is to DO NOTHING</p> <ol style="list-style-type: none"> 1. None of the presented proposals will prevent ALL flood events along the Wakehurst Parkway, particularly if you take into account the increasing frequency of flood events predicted due to Climate Change. 2. In common parlance, the proposals are "Band-aid Solutions" that fit within the given budget provided by the Roads and Maritime Services (RMS) for now. 3. Wakehurst Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a crucial link that needs to be properly funded by State Government. 4. The Council has been requested to provide solutions that involve using the surrounding bushland - letting the RMS off the hook from having to do anything about the road itself. 5. The RMS may say that the water comes from the surrounding environment and that the administrators of the bushland must solve the problems but actually, it is the alignment of the road that has caused the modification of the surrounding environment that now causes the flooding. It is the road that needs to be modified not the surrounding environment. 6. The flooding occurs at several different locations along the Wakehurst Parkway. 7. ALL the given proposals involve serious environmental disturbance including <ol style="list-style-type: none"> a) removal of large areas of bushland and b) exposing contaminated sediments that would need to be treated (and the cost of de-contaminating those sediments is not revealed) 8. There is no discussion of other solutions to the flooding issues - such as raising the road or building bridges at critical points. The RMS has studied some of those solutions and concluded that they are too expensive but there is no mention of them in the current list of options. The public deserves to know the cost of doing the flood proofing PROPERLY. 9. If the road were elevated by bridges, animals could move through underneath. The road needs to be redesigned to allow for animals to move safely from one area of bushland to another. 10. It is not a satisfactory process to ask the public to choose between bad solutions and worse solutions without revealing the costs and the environmental impacts of a good or better solution. FIX THE ROAD, DO NOT DESTROY MORE OF THE ENVIRONMENT
S57	<p>What a crap solution - This is just a perpetuation of the past and compromises both nature and the ratepayer - The WIN WIN is a RAISED or ELEVATED roadway. Simply elevate the road 20 to 30 ft above the current road, ie Freeway style. Leave the road below for "local" traffic, bike riders, wallabys and the vegetation is intact as it stands.</p> <p>If you have any vision make it dual carraige way with 1 lane extra each side for emergency vehicles or a BLine style of transit which meets the NB Tunnel straight into town..</p> <p>Come on - in 1942 Bradham drew this out and it hardly a new idea..</p> <p>At the</p>
S58 / S208	<p>Comments recived: 8/7/21 (S58)</p> <p>The negative-to-disastrous effects on the environment & wildlife along the Wakehurst Parkway north corridor are not worth the results.</p> <p>Comments received: 27/6/21 (S208)</p> <p>I have lived near to, or travelled regularly through the Wakehurst Parkway for the past 60 years. I'm generally supportive of making the Parkway less flood prone, especially now that Mona Vale Hospital is no more and we have to go to Northern Beaches Hospital for critical treatment. However, I am even more supportive of the environmental value of the Parkway as a wonderful belt of green from Clontarf to Narrabeen, even though weed infested. Therefore I would only support Option 2 at the most and any work carried out would need to minimise effects on threatened ecological</p>

	communities. As some of the land is owned by the Metropolitan Local Aboriginal Land Council, it and indigenous custodians of the land must be consulted and their views taken into account.
S59	All of the options appear to be band aid solutions that significantly impact the surrounding bush land and do not significantly reduce flooding events. Wakehurst Parkway is a state road and needs to be reconstructed as an elevated roadway over the floodplain as has been done on other main roads. The minor benefits in all the options do not justify the financial or environmental cost, particularly as we are likely to experience more intense, wetter East Coast Low storms due to climate change.
S60	I do not need to go into any detail on why the last centuries and ongoing/increasing destruction of what little wildlife and established habitat remains on the northern beaches is catastrophically wrong. The Wakehurst is an incredibly valuable rich, sandy soil ecosystem and due to this and other geological considerations, it floods and it should flood! This proposal is stupid and incredibly ignorant, if the Wakehurst floods several times a year well so be it...not exactly one of our most pressing issues. Enough wildlife is ran over on the Wakehurst which is littered with garbage like every other road on the northern beaches (mona Vale is another disgrace). Maybe bring back mona Vale hospital.. but then again Rob stokes got rid of it for the exact reason of pushing projects like this and his mass population density plans for northern beaches and greater Sydney .
S61	From my point of view, the improvements don't seem to be significant enough compared to the costs, ecological damages due to excavation and clearing, and the length of time of traffic disruptions. Moreover, people and families have been using the area for recreation and exercise for a while and we are not sure how that would change the character of the area and even whether the ecology would recover after. Moreover, there are alternative roads like Mona Vale road which is being widened and already has significant ecological impacts on its own, and Warringah road which has a tunnel built to improve traffic. Furthermore, the events when the parkway were flooded were when there were heavy rains or storms which already impacted traffic everywhere around Sydney anyway. Alternative solutions such as building bridges or raising the road on the lowest points of the parkway, or building levees on the side of the road to disperse the flood water to a nearby creek (artificial or otherwise) should be considered. I think there has been a lot of ecological damages around the area, e.g. Northern Beaches hospital and Mona Vale road widening, and we need to start thinking about living with the nature and reducing humans footprint on the environment to ensure future generations of residents still enjoy and benefit from the Northern Beaches' natural beauty and for the nature itself to have a chance to live and flourish. A paradigm shift has to be done from human centric solutions to the problems to living with nature as nature is also living beings which need to be respected and protected. Full disclosure, I have lived in NB for more than 8 years and I use Wakehurst Parkway almost daily and I also often use NB's hospitals services, but I believe we could have done better for the environment. There are many other solutions to the same problem which don't have significant impact to the environment, its just that they would require thinking outside the box. Thank you.
S62	1. None of the presented proposals will prevent ALL flood events along the Wakehurst Parkway, particularly if you take into account the increasing frequency of flood events predicted due to Climate Change. 2. In common parlance, the proposals are "Band-aid Solutions" that fit within the given budget provided by the Roads and Maritime Services (RMS) for now. 3. Wakehurst Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a crucial link that needs to be properly funded by State Government. 4. The Council has been requested to provide solutions that involve using the surrounding bushland - letting the RMS off the hook from having to do anything about the road itself. 5. The RMS may say that the water comes from the surrounding environment and that the administrators of the bushland must solve the problems but actually, it is the alignment of the road that has caused the modification of the surrounding environment that now causes the flooding. It is

	<p>the road that needs to be modified not the surrounding environment.</p> <p>6. The flooding occurs at several different locations along the Wakehurst Parkway.</p> <p>7. ALL the given proposals involve serious environmental disturbance including</p> <ol style="list-style-type: none"> removal of large areas of bushland and exposing contaminated sediments that would need to be treated (and the cost of decontaminating those sediments is not revealed) <p>8. There is no discussion of other solutions to the flooding issues - such as raising the road or building bridges at critical points. The RMS has studied some of those solutions and concluded that they are too expensive but there is no mention of them in the current list of options. The public deserves to know the cost of doing the flood proofing PROPERLY.</p> <p>9. If the road were elevated by bridges, animals could move through underneath. The road needs to be redesigned to allow for animals to move safely from one area of bushland to another.</p> <p>10. It is not a satisfactory process to ask the public to choose between bad solutions and worse solutions without revealing the costs and the environmental impacts of a good or better solution.</p>
S63	<p>Mona Vale road has been upgraded, Pittwater road has 6 lanes. The parkway is closed maybe 6 times a year. I don't see the need to destroy such a beautiful area. Many native endangered plants and our most unique wild life call this place home. This magnificent area should not be spoiled for 6 days of inconvenience.</p> <p>Yes I use the parkway most days.</p>
S64	<p>In Narrabeen Catchment, the solutions you have proposed are cr*p. You are asking us to choose between equally cr*p solutions that are cheap, nasty, ineffective and will ultimately not be sufficient for forthcoming future climate change issues (or even current issues).</p> <p>I agree with friends of Narrabeen lagoon as follows: The Northern Beaches Council is currently inviting the community to comment. Please log in and select to do nothing.</p> <p>The choice of actions are to remove 3 hectares of pristine bushland and to remove 1 kilometre at 1 metre depth of the soil in middle creek to stop the road flooding. The soil is known to be contaminated with lead and benzene.</p> <p>None of the options on these actions to be taken will fix the flooding. The choices are different options for reducing the number of days per year that the Wakehurst Parkway needs to be closed due to flooding.</p> <p>Key points include:</p> <ol style="list-style-type: none"> None of the presented proposals will prevent ALL flood events along the Wakehurst Parkway, particularly if you take into account the increasing frequency of flood events predicted due to Climate Change. In common parlance, the proposals are "Band-aid Solutions" that fit within the given budget provided by the Roads and Maritime Services (RMS) for now. Wakehurst Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a crucial link that needs to be properly funded by State Government. The Council has been requested to provide solutions that involve using the surrounding bushland - letting the RMS off the hook from having to do anything about the road itself. The RMS may say that the water comes from the surrounding environment and that the administrators of the bushland must solve the problems but actually, it is the alignment of the road that has caused the modification of the surrounding environment that now causes the flooding. It is the road that needs to be modified not the surrounding environment. The flooding occurs at several different locations along the Wakehurst Parkway. ALL the given proposals involve serious environmental disturbance including <ol style="list-style-type: none"> removal of large areas of bushland and exposing contaminated sediments that would need to be treated (and the cost of decontaminating those sediments is not revealed) There is no discussion of other solutions to the flooding issues - such as raising the road or building bridges at critical points. The RMS has studied some of those solutions and concluded that they are too expensive but there is no mention of them in the current list of options. The public deserves to know the cost of doing the flood proofing PROPERLY.

	<p>9. If the road were elevated by bridges, animals could move through underneath. The road needs to be redesigned to allow for animals to move safely from one area of bushland to another.</p> <p>10. It is not a satisfactory process to ask the public to choose between bad solutions and worse solutions without revealing the costs and the environmental impacts of a good solution.</p>
S65	<p>I am concerned that no matter how much you spend, flooding along the Wakehurst Parkway will still occur.</p> <p>I am also concerned any flood mitigation works will impact on the environment to the detriment of flora and fauna.</p> <p>The Wakehurst Parkway is a unique area in the sprawling and over-developed Sydney metropolitan area.</p> <p>Let's keep it that way.</p> <p>And if closure because of floods is a rare inconvenience, so be it.</p>
S66	<p>I'm greatly concerned about the environmental impacts of the proposal.</p> <p>If any form of proposal goes ahead there, council should commit to delivering more offsets than required under legislation so that the proposal may deliver a net benefit to the environment.</p> <p>I'd also suggest that the new part of road have best standards for roadkill prevention including fencing, underpasses and overpasses for animals.</p>
S67	<p>Fix the actual problem, not ruin the lagoon!</p>
S68	<p>I am concerned that none of these options are a permanent solution. Wakehurst Parkway is a State road, and major RMS project on the road itself is needed to find a permanent solution, not the present options for Council work on the surrounding bushland and sediment. Furthermore any solution must address the environmental impact on protected bushland, wildlife corridors and animal habitat.</p>
S69	<p>Why don't you simply elevate the road in the required sections. Doesn't upset wildlife and minimal damage to flora.</p> <p>Do none of the above.</p>
S70	<p>We should realize that we have to live with the environment. There are other access roads not subject to flooding which will provide access to the hospital.</p> <p>There is no guarantee that what ever options are selected it will provide long term solutions.</p>
S71	<p>Hello</p> <p>Has the Proposal off a inland bridge built over the existing road like the one built through the mid coast area near Kempsey been looked at . The cost would be worth getting a lot of cars north of Narrabeen to the city and the hospital etc quickly and safely. Help to take the load off Pittwater rd through Collaroy and Dee-why! It would have no impact on the environment , in fact stop all the road kill in that area which is high! Under the bridge could be a lane for lake users and a safe passage for bikes to go all the way to Oxford falls . Thank you</p>
S72	<p>Hi,</p> <p>I use the Wakehurst Parkway to get to and from every day and have done so for more than 20 years. I am strongly against any environmental degradation or ecological damage caused by flood mitigation action. Yes it's an inconvenience when closed and I'm a bit late for work or a bit late getting home or have to leave work early to meet a commitment but it's hardly a disaster; with some effort I can organise around it. Losing or damaging our local ecology IS a disaster. If people want a location where cars come first, where they can't deal with a small inconvenience, why not live somewhere else? A second point about why there is no need to change the Parkway is that with the new interchange at French's Forest and with (soon) a new Mona Vale road, those will be fast alternatives to the Parkway when flooded.</p>
S73	<p>The inconvenience of the parkway closing 6-7 times per year is very minor compared to the loss of wildlife, natural habitats, and Indigenous land lost due to the upgrades. I'd rather we spend \$17.5 million in taxpayer money on safeguarding these things. Additionally, the roadworks would be a huge obstruction to the daily commute for Northern Beaches residents, who prioritise less traffic, smaller roads, and beautiful scenery.</p>
S74	<p>Loss of biodiversity must be valued ahead of more damage to bushland. I am pleased that the options are being presented to residents. However, more publicity is needed over the rights of residents to influence the expenditure of their rates on environmentally important issues.</p>

	<p>No government should have the rights to damage ecosystems on any scale and Northern Beaches Council should also be taken to task for allowing the disastrous destruction witnessed on Mona Vale Rd. Ecocide is now enshrined in International law and citizens have the ability to challenge idiotic counselors and governments decisions over matters that will have generational impacts.</p> <p>The marginal inconvenience of Wakehurst Parkway closures at historic levels is immaterial to the livelihood of drivers using the road. This is particularly so in comparison to the gross mismanagement of the economy from COVID-19. Leave the Parkway as it is and reduce the blatant waste of ratepayers' money.</p> <p>Perhaps a survey to ratepayers of the goal of reducing or removing local government or even the state government would be valuable.</p>
S75	No change option 1. Do nothing. It is a beautiful part of our northern beaches. A place for our next generation to breath in fresh air and enjoy life
S76	<p>It's not right for our native flora and fauna and ecosystems</p> <p>Please leave it be</p> <p>I can imagine the road will be closed much longer from making these 'non flooding' options which may not even work then the once in a while flooding closures anyway</p>
S77	<p>I strongly believe you should adopt option 1 and do nothing it's a beautiful balanced ecosystem and also a beautiful road to drive along, we don't need to go disrupting it because of naturally occurring flood water 6-8 times a year.</p> <p>It's not a bad thing the road gets closed after heavy rains there are other options and apart of living on the northern beaches is living and working with nature, we can't just change develop and destroy everything that's a slight inconvenience.</p>
S78	I am very concerned about the environmental impact this will have. I know it is an inconvenience for many people when it floods but this only happens a few times a year and there are alternative routes!
S79	So much land clearing around the Northern Beaches already, don't do any more please.
S80	This road is a pleasure to use and the character and environment would be adversely affected by any significant works. The occasional road closures caused by flooding are only a minor irritation that is tolerable.
S81	The parkway really isn't closed that much. Best to just leave it alone and put up with the odd closure during heavy rain. It's not worth being stuck in roadworks for 40+ weeks and disturbing a nice bushland area. Why not just have a variable speed limit during heavy rains instead of closing the road, on most occasions where it is closed I am sure everyone could just drive slow like 20km/h and still get where they want to go.
S82	<p>The widening of Mona Vale Rd will provide adequate traffic flow.</p> <p>Further, the extensive road works being undertaken and recently completed in the Northern Beaches are overwhelming.</p>
S83	<p>I think that you need to go back and revisit your options as I don't like any of your short listed options.</p> <p>The primary issue I have is that the removal of material, which is going to adversely affect protected fauna is at best a temporary solution as within a few years it will return. This does not seem to be a good use of available funds.</p> <p>So given the short listed options, the only equitable one is to do nothing. This is not an option as something needs to be done. So back to the drawing board and come up with a sustainable long term solution that does not adversely impact the environment and provides a long term solution.</p>
S84	An alternative suggestion solving two problems - a raised roadway, high enough to allow water and wildlife to flow/travel underneath. This could be done gradually as funding became available.
S85	please stop fiddling with our natural spaces
S86	I would like an historical perspective on flooding - if flooding is a usual regular event it should not altered to limit that. If it good for the health of the creek system leading into Narrabeen lake that there be regular water flows (ie floods) then the impact on the enviroment should be nil. The existing ecosystem should not be damaged/changed to limit naturally ocuring flooding.

S87	<p>All of the options from B2-5 seem an incredibly expensive and environmentally destructive in what is looking to solve a known problem of the road being closed only 6-7 times per year.</p> <p>Looking at option 5 - I fail to see how 40+ weeks of construction, significant truck movements, endangering threatened ecological communities is a reasonable expense to prevent a road being closed for 6-7 days per year</p>
S88	<p>Wakehurst parkway is a NSW state-owned road and needs to be funded to provide better solutions. We should plan for more floods. The impact of climate change has already brought us heavier rainfall, more rainfall and flooding. Raising the road, to make it more of a causeway and strategic placement of bridges, would provide better solutions and reduce any impact on the surrounding bushland. Scouring and removing sediment will increasingly become regular maintenance work the bill paid by northern beaches Council. The NSW government seems to have plenty of money to spend on roads we should request some via local MPs James Griffin and Rob Stokes to pay for this work.</p>
S89	<p>Wakehurst Parkway needs to be upgraded to a 4 lane road and it will be done at some stage, so why not get on with it?</p> <p>That's why I have ticked the box [Do nothing]. Don't waste money on Band-Aid measures.</p> <p>I read that you have around \$14million available from the State Government and this should be adequate if handled sensibly and without a host of studies. Just get on with it!</p> <p>There's one main section that floods and I believe the way to tackle that is to create a new elevated two lane road using sandstone spoil from various projects that are either underway right now or will soon be: The Mona Vale Road works are generating many tonnes of sandstone waste; The new harbour tunnel will generate many tonnes of sandstone waste and there's always various developments going on that need to get rid of sandstone waste that they dig out for their underground car parks etc.</p> <p>This sandstone waste is ideal for a road base and this can be used to create the elevated road beside the existing one. Once this elevated road is complete, then do the same roadworks to elevate the old flood prone road.</p> <p>So by using basically free fill, over a few years, the whole of Wakehurst Parkway can be easily made flood proof and a two up and two down roadway.</p> <p>As I said at the start, we all know that it's just a matter of time before this road will have to be made a 4 lane access way to and from the hospital etc. So rather than waste money on bandaid measures now, just make a logical start right now on building the much needed infrastructure.</p>
S90	<p>Probably won't be many votes for this but I don't mind it the way it is. Part of the reason for that is that it discourages traffic. If the road is improved it will likely mean higher volumes of traffic through a sensitive and beautiful part of Sydney, invariably making it more sensitive and less beautiful. Unless there is a danger to life, just leave it. It may be annoying in that event but there are several alternatives, even to the hospital.</p>
S91 / S379	<p>Comments received: 26/6/21</p> <p>I commented before that I believe an additional option was required - for dynamic flood mitigation. However, I did not describe what I meant by this.</p> <p>Dynamic flood mitigation can be described as smart flood mitigation. Rather than static culverts, sensors would monitor water levels in the lagoon and wetland areas, and with weather forecast and other environmental information, dynamically release or retain water in the swamp / wetlands / saltmarsh forests based on flood models.</p> <p>This option would have the same flooding results as Option 5, but with less environmental impact. It would also confirm the lagoon and associated swamp / wetlands / saltmarsh as an environmentally important asset for the Northern Beaches.</p> <p>This dynamic approach would be expected to be more expensive than option 5, but must be considered as an option. It may not be financially viable, but it must be considered as an option. Any decision which does not consider include this option would be flawed.</p> <p>The council could discuss with the state government whether some of this additional cost could be covered by them under their Smart Cities or Environmental Protection funding initiatives.</p> <p>Comments received: 5/6/21</p> <p>An investment of up to \$17.5M to mitigate flooding on Wakehurst Parkway North is a good</p>

	<p>investment. Compare this to the multi-billion dollar investments by the NSW government on toll ways and metro rail. Given the lack of train, light rail or metro lines, Northern Beaches relies heavily on its road connections. I would suggest an investment of up to \$30M could be justified.</p> <p>Closure of Wakehurst Parkway North impacts more than just residents from the coastal areas. In one case earlier this year, I was stuck for over an hour on Pittwater road travelling from Mona Vale hospital to Warringah Mall Brookvale. This traffic was caused by the Parkway being closed due to flooding and an accident on Mona Vale Road occurring at the same time. Any assessment of the impact of the Parkway closures needs to take into account the full impact, not just the Parkway's regular traffic loads.</p> <p>From a financial viewpoint, Option 5 provides the greatest relief from the impacts of flooding experienced by Northern Beaches residents and businesses. Over a 5 year timeframe, I am sure that reducing the number of closure events from 32 to about 3 can be demonstrated to cover the \$17.5M cost.</p> <p>I would therefore recommend that any options only need be considered from an environmental impact perspective.</p> <p>My preference would be for option 5, subject to a detailed environmental impact assessment. The mitigation elements could therefore be reduced or altered subject to this assessment. Perhaps some imaginative solutions to reduce the impact on the wetlands could be found (e.g. active weirs and/or pumping stations rather than culverts), even if this results in high costs.</p>
S92	<p>Given the mass subdivision planned for Ingleside, the clearing of five football fields of vegetation must not occur - it is way too big a pay off to deal with six road closures. The Shri King environmental habitat is highly distressing. There is no thought to the wildlife that we live amongst. This is why many of us moved here. And living in such an environmentally-rich area means somethings we might have to deal with natural elements such as bushfires and floods. It is not the sole thoroughfare - please do not destroy the environment for a road</p>
S93	<p>The number of closures per year, which is very low, does not justify the environmental damage to native fauna and flora.</p>
S94	<p>Not worth doing any damage to this beautiful strip so close to Narrabeen lake.</p> <p>We cannot afford any further clearing of flora and fauna. Many species are endangered and need the habitat. This proposal would have flow on effects for the species in the Narrabeen lake, which I think we would all agree needs to be kept healthy. Also, the plants and trees have an important role in keeping the temperature on the northern beaches at a liveable level (Australia is already prone to very hot summers). Climate change and global warming- this is not wise. People on the northern beaches proudly care about the environment. Significant flora and fauna were cleared for the Mona Vale road development. If we are not careful we will not have any significant bushland areas left. As planners you must think of that. Once it's gone it's gone. It's irreplaceable. As the saying goes "only when the last tree is cut down will we realise we can't eat money". As humans we depend on nature like this thriving to keep the temperature low. It sustains us, and it is never efficient or wise to destroy what sustains us. Therefore instead of cutting it down we need to consider a lifestyle shift towards working around the natural environment. It is part of life that occasionally this road floods. The song that you can "be in paradise and put up a parking lot" resonates. Especially post COVID-19, people would choose to work from home and stay indoors on a rainy day anyway, avoiding the need to use this road.</p>
S95	<p>The environmental impacts on plants and wildlife and the cost of all the projects are definitely not justified by having the road open on more days per year. The number of days the road is closed per year is so small that it is outrageous to think killing all those trees and affecting the wildlifes home is worth it for a few easier road trips.</p>
S96	<p>The level of vegetation clearance is not justified by the options presented. It is not clear why works to the Wakehurst Parkway itself being flood-proofed isn't an option. Effectively this appears to be addressing an issue which is actually the responsibility of TfNSW - its their asset. Despite the grant funding.</p> <p>The ongoing effectiveness of the options also appear not to be addressed, at least in the summary table. What is the maintenance regime and costs? What is the likely 'life span' of the sediment removal - will this need to be repeated every 5 years? 10 years? No construction works delivers a project without an operational/maintenance cost. Why is this not in the summary?</p>

S97	<p>I have read through the options, and the do nothing is the obvious one to take and certainly NOT Option 5, 4 or 3, and I must say it is difficult to believe these would even be considered. We just cannot have any more damage done to the flora and fauna in this unique area and the permanent erasure of certain plant species and aqua animals, when it has already undergone much destruction during the NB hospital build which it will never recover from.</p> <p>The Forest High School removal (which incidentally is the stupidest idea I have ever heard) will also impact environmentally in this same area, When is it going to stop? It has to stop before the Northern Beaches is wrecked.</p>
S98 / S201	<p>Comments received: 28/5/21 (S98) reduce the rates</p> <p>Comments received: 28/5/21 (S201) Very difficult to see a return on investment for the large outlay when alternative traffic routes are available and the cost to the environment is very high. A small inconvenience occasionally doesn't warrant this expense</p>
S99	<p>The rare times the Wakehurst Parkway is closed due to flooding is not worth destroying over 1,000 trees let alone the damage to our precious wildlife. It's not the only road out of the peninsular. We don't want to turn our beautiful northern beaches into the treeless western suburbs.</p>
S100	<p>Thank you for the opportunity to comment on the proposed Wakehurst Parkway Flood Mitigation. The **** has concerns that works upstream of the Sydney Academy of Sport may exacerbate the flooding experienced at the venue. There appears in the information provided to be no consideration of the impacts on the downstream area where the Sydney Academy of Sport is located and which already experiences occasional inundation affecting its operations and the availability of facilities for the Northern Beaches community.</p> <p>Given the nature of the clients and programs conducted at the Sydney Academy (e.g. residential programs for participants with disabilities), it is imperative that flooding impacts do not increase as a result of the proposed works. The Office of Sport will submit a more formal and detailed response to Northern Beaches Council proposal. In the meantime please accept this email as an objection to the proposal until the impact on the Academy of Sport is clarified and measures taken to prevent those impacts.</p>
S101	<p>Do nothing to endanger or alter the natural environment. It's a flood plain for a reason the ecology of the area depends on the water course and the benefits it provides to the immediate area.</p>
S102	<p>The parkway is a beautiful entrance to the beautiful Northern beaches. All my visiting friends comment that it is a beautiful way to arrive at your destination, -in the heart of suburbia. It's closed rarely, and there are many options when it is, which don't take any longer and may be quicker. To ruin the environment for a couple of days less of flooding a year is vandalism. The natural beauty of this area is constantly under attack, but SHOULD be sacrosanct. Once these places are gone they don't come back. If the flooding is too much inconvenience for someone, there are plenty of places to live where this doesn't happen. Stop ruining our beautiful area!!</p>
S103	<p>I feel that despite Council protestations, the Wakehurst Parkway will be widened in the next ten years so any more disruption at this stage would be really annoying and unnecessary. The time the work will take to complete would almost add up to the time the WP is closed because of flooding. The destruction of native species of fauna and flora is just not justified when flooding still may occur. Look at heartbreaking destruction wrought on the area due to the Mona Vale Rd widening. The misguided placing of the NB hospital is of concern, however, so as a solution I suggest a short passing lane on the WP (if possible) and a helicopter at MV hospital for emergencies.</p>
S104	<p>Doesn't really seem much point as the road is sure to be widened in the future impacting native flora and fauna anyway.</p>
S105	<p>There should be an option 6 "Floodproof" irrespective of cost. I object to the deliberate channeling of user preferences that excludes this option</p>
S106	<p>I would like to see money saved in order to raise the height of the road at a later date rather than spend money on the "B" and other options.</p>

S107	<p>I believe the proposed works are unnecessary. The widening and upgrade of Mona Vale road will provide a much better and accessible alternative on the relatively rare occasions that the Parkway is closed. Indeed it may reduce usage of the Parkway generally. This will save huge costs which can be redirected to other projects and save any impact on the environment.</p> <p>I have been a regular user of Wakehurst Parkway for decades. The occasional closure for flooding has never been more than a minor inconvenience. One might also say its one of those quirky or unusual things that makes the Northern Beaches different.</p> <p>The Parkway is a beautiful and unique stretch of road through bushland and the lake . It should be treasured and protected.</p>
S108	<p>None of the proposed options are feasible when taking into account the impact on the environment and massive cost.</p>
S109	<p>A raised road needs to be built so there are zero road closures and we have safe access to Northern Beaches Hospital 365 days a year. This would have a significantly lower environmental impact on this previous piece of land. Animals could safely traverse under the road. A much higher cost but it would only have to be done once. The people of the Northern Beaches should be able to safely and quickly access a hospital if we need it.</p>
S110	<p>Please note: Option 1 has only been selected for the purposes of submitting my comments below. Option 1 through 5 are all highly undesirable in my opinion.</p> <p>All options (excluding Option 1) requires the surrounding natural landscape to respond to the existing road, rather than have the road respond to the surrounding natural landscape... In my opinion, the entire premise of all options appears backwards.</p> <p>It's really concerning these options have survived internal scrutiny and are now being presented to the public as the best possible options available. Local Northern Beaches residents have been waiting a very, very long time for a significant upgrade of Wakehurst Parkway and the best case scenario of 1in2 year PMF protection paired with the destruction of local habitat is not what local residents have been waiting for – especially given its critical importance linking the peninsula to the Northern Beaches Hospital.</p> <p>The upgrade must be sensitive to the natural environment, ecosystems and habitats of endemic flora and fauna located throughout the corridor as well as Narrabeen Lagoon. The options presented impose an antiquated engineered solution to an environmental problem. Sediment will continue to be deposited along the corridor. Options that propose the dredging of sediment are short-term solutions that do not acknowledge or respond to natural environmental processes. The dredging of sediment from native endemic vegetation communities will result in significant destruction of ecosystems and habitat areas and should not be allowed to occur. The removal of exotic weed species and restoration of local vegetation communities needs to be executed in respect of the existing native environment that exists today.</p> <p>The potential impact upon Local Aboriginal artefacts may be discovered – especially along freshwater sources such as Middle Creek and negotiations with adjacent landowners, such as the Local Aboriginal Land Council, must consider the immediate impact the project will have on adjacent lands.</p> <p>It's unlikely there will be another opportunity to upgrade the Wakehurst Parkway for another 50 years if one of these proposed options is realised. The significant disruption to traffic for more than 40+ weeks does not offset the insignificant short- or long-term benefit of the project. New hospitals are typically required to be designed to accommodate a 1:10,000 PMF event for obvious reasons. What PMF event should the main arterial road connecting the entire population of the peninsula to the Northern Beaches Hospital be designed to withstand?</p> <p>Subject to working through the complexities associated with the staging of construction and maintaining traffic movement, the opportunity to upgrade the Wakehurst Parkway at the flood prone areas from the existing on-grade solution to a low profile suspended land bridge elevated above the underlying ecological communities, must be championed.</p> <p>The project must have a light footprint, embrace green infrastructure, incorporate water sensitive urban design principles including the implementation of rain gardens to treat stormwater runoff and manage high and low flow rates whilst improving and supporting ecological communities and their undivided connection. This low profile suspended land bridge option also provides the opportunity to incorporate active transport throughout the length of the corridor and its connection to the highly</p>

	<p>popular Narrabeen Lagoon Trail network.</p> <p>The Wakehurst Parkway upgrade needs to be done once and done well. If this means additional funding needs to be sourced – so be it. The cost of a significant project is temporary. The legacy of a significant project is permanent.</p>
S111	<p>I enjoy the natural environment of the Northern Beaches.</p> <p>I would like my son to also grow up with the same natural surroundings.</p>
S112	<p>As a resident of the beautiful Northern Beaches area, I regard the natural environment as most important and would be devastated to know that for flood proofing there would be habitat loss and disturbances for our wild life.</p> <p>There are alternative routes, which although they take longer are still very usable to reach the hospital and other essential or non-essential services and destinations.</p>
S113	<p>It's really not that much of a problem. There are other routes in and out of the area. People need to learn to adapt. The best idea is to stop overdevelopment in the area. Plant more trees, especially natives!</p> <p>If option 2 were to go ahead and native vegetation were to be removed, a massive replanting of vegetation needs to take place in the area to compensate for the destruction.</p> <p>The destruction of the northern beaches needs to stop.</p>
S114	<p>Why not build a slightly raised bridge where the flooding occurs regularly so as not to impact on the local flora and fauna. It should have been done 20 years ago.</p>
S115	<p>It's a B road. There are alternatives. Do nothing</p>

S116	<p>Council need to lobby state govt to release all research and costing to raise the road at key points - mainly the low lying bends. It is a state built arterial road leading to state built northern beaches hospital which norther beaches residents should feel confident to access 365 days a year - it should not be a lottery on a rainy day that you will get to hospital on time. More transparency is required. Removal of bushland to build culverts is not the answer, this has been tried before and although it has helped it hasn't fixed the problem. There will be more flooding on Parkway from developments at Frenchs Forest, Beacon Hill, Collaroy Plateau and Narrabeen as this is contributing factor to increased sedimentation. Council do need to open Lagoon whenever heavy rain occurs as this relieves back log of water in middle and deep creeks. We have impacted on area so much with building and roads we cannot continue to let it open naturally as it has done for thousands of years. Option for concrete barriers along road near the Academy of Sport is not a good option as this will result in back flow of water across ovals, administration building and entrance. Can the road be raised along the low lying bends area as this is only area it really floods. thank you</p>
S117 / S148	<p>Comments received: 21/6/21 (S117) Thanks to the staff at Narrabeen scout hall. The costs of doing anything appear to outweigh the results. Comments received: 7/6/21 (S148) The State Government promised that the flooding on the Parkway would be solved before the new hospital opened. An undertaken not kept. However "The raising of Wakehurst Parkway in key locations and corresponding culvert upgrades appeared to provide a longer-term sustainable option to permanently reduce the incidence of flooding and road closures in larger flood events, however this would have a significant capital cost and would also likely have environmental impacts. The raising of Wakehurst Parkway is not under further investigation and was discounted as an option from this assessment." (Parkway feasibility study, 8/3/21) The most effective solution is dismissed without comment. The sea bridge at Wollongong cost \$49 million but it is 70 meters high across an ocean - a 1 meter high suspended road should be feasible. The feeder streams flow through deep gorges, small retention dams with outlet pipes to permit existing and increased flows could be used to slow the outflow and allow water to disperse.</p>
S118	<p>If drivers have issues with the minimal time of flooding that occurs each year why not get up earlier and use Pittwater Rd or Forest Way. Why destroy the flora fauna and aboriginal history as well as using up so much funding when Wakehurst Parkway is closed for only a couple of days each year. What a waste of time.</p>
S119 / S526	<p>Comments received: 21/6/21 (S119) Why hasn't a 4 lane 'flyover' for 1 km from the entrance of the sports academy been considered? Little environmental impact and probably cost effective Comments received: 29/6/21 (S526) Don't be so short sighted. Why not look at this problem in conjunction with the road widening project and kill 2 birds with one stone? Put a 4 lane flyover over most of it. Minimal environmental impact and eliminates the flooding problem.</p>
S120	<p>Choices provided are too limited and one is forced to choose a possibly unwanted option to comment. We are aiming to decarbonise, are we not?? How about the option of: 1) Closing the Parkway for private motor vehicles, make it an exclusive public transport and ambulance road, with a world class scenic bicycle way? 2) turning the Pkw into a ONE WAY only road, as to allow getting to the hospital quickly and using the other lane for human leisure- bicycle riding and walking? (The new Mona Vale Rd will have huge capacity) 3) pumping the excess water into the lagoon via a pipe, without excessive vegetation removal?</p>

S121	<p>I understand that the flooding is inconvenient and have often had to drive alternate routes because of the closure but I feel the environmental impact is far too great. Options 2-5 have similar environmental impacts so I don't believe any of these are an option.</p> <p>We have had so much destruction across the country that we have to step back and look at the long term impacts on our native flagrant and fauna.</p>
S122	<p>The remnant bushland surrounding the wakehurst Parkway is important to protect the Narabeen Lagoon catchment and as one of the remaining wildlife corridors from Garigal National park and Manly war memorial park down to narrabeen lagoon.</p> <p>I acknowledge the issues with flooding on the wakehurst parkway but any work conducted should be done with minimal impact to the local natural environment.</p>
S123	<p>I have selected "Do Nothing" to signify that none of the proposed options are suitable, not that nothing should be done. As this is a state road, it makes no sense that the NBC council is canvassing options for the work, and then presumably carrying out the work? It is not clear in this website, who will oversee/perform the work. It should be undertaken by the NSW state government, who have more experience with such major roadwork. The proposed options (that will actually give a useful reduction in flood risk) entail large levels of environmental damage that can't be justified. Since the nSW government closed Mona Vale hospital, Wakehurst Parkway is critical for access to the Northern Beaches Hospital. Thus the NSW government must properly fix this road. This will likely require several elevated sections of roadway (essentially long bridges) to allow floodwater and animals to cross safely underneath. This will no doubt cost more than has been budgeted, but we need a proper fix for this road. At the same time, consideration should be made for the future effects of climate change (eg sea level rise; increasing rainfall) and the road built accordingly now, not in another 10 years when the changes cause more flooding. Please do this right first time, not a quick, cheap fix that will need re-doing in 10 years.</p>
S124	<ul style="list-style-type: none"> - Reinstate Mona Vale Hospital to Level 3 or 4 on the existing Mona Vale site, so that the Pittwater community is not as dependent on this roadway for transport to the NB Hospital. - This is a State government road and should not be dealt with by NBC. - This will cause huge environmental damage to enormous sections of bushland and will not solve the problem. - There will be contaminated sediment washing into Narrabeen Lagoon and down Middle Creek, potentially poisoning the waterway which is habitat for the endangered myriad of birds and animals listed above. - It should not be contemplated until it can be done properly by raising the road and putting in bridges to protect the wildlife and bushland. - Our family are totally opposed to any and all of the above options, and in addition do NOT want a NB tunnel that will also destroy huge swathes of bushland at the southern end of Wakehurst Parkway and pollute Manly Dam - and then push further traffic onto the above environmentally sensitive section of the Parkway. - Stop the excessive push for development & population increases on and around our environmentally sensitive Wakehurst Parkway and the Pittwater area in general and let it be the lungs of Sydney, instead of further hard surface & destruction of important ecological communities. - These alternatives are NOT permanent solutions.
S125	<p>I don't believe any of the solutions are right- the road will still be too low and the environment will suffer for little gain. Culverts will block up with leaves and flood anyway</p> <p>The plan needs re-thinking</p>
S126	<p>This community consultation process is flawed.</p> <p>There is no "Other" option. None of these options are acceptable yet to submit this submission I have no alternative other than choosing the option to "Do Nothing" that is not what I want. These are bandaid and environmentally destructive solutions.</p> <p>Access to the Northern Beaches Hospital by floodproofing the Wakehurst Parkway is critical for the community and can be achieved with the least impact on the natural environment by construction of a raised roadway and bridges. Funding must be provided by all levels of government for this upgrade.</p>

S127	<p>The Parkway is just what it says; a wonderful Park of Peace, Beauty and teaming wildlife. We are strongly opposed to any options, as the the impact it has on the environment is far more negative than the handful of closures we possibly will have each year.</p> <p>On top of that: Instead of people thinking how can I get quickly to a hospital, how about visualising a life where one lives healthy and happy, never needing to visit a hospital in the first place..... win... win... Situation. Thank you 😊👉</p>
S128	Option 1or option 2, we need to minimise the damage to our natural environment. I would like to see more emphasis on protecting our native flora a fauna
S129	Use a different route when it floods.
S130	We knew the Parkway flooded when we decided to live on the beaches. Stopping the flooding will impact the the bush negatively and there are alternative routes for residents when needed.
S131	<p>The Wakehurst Parkway is a State road providing key access to the Northern Beaches Hospital for people at the northern end of the peninsula as well as key accessway for commuters travelling from the Northern Beaches to other parts of Sydney. RMS should be investing adequate funds to properly upgrade the parkway instead of relying on Local Government to fund it, which has resulted in the Council putting forward environmentally damaging band-aid solutions which still do not remove all flood risk.</p> <p>The environmental impacts are significant and unacceptable, particularly because the solutions proposed do not entirely remove the risk of floods. Information should be provided to the public explaining why other potentially more costly solutions have not been considered, eg, elevating the road or building a bridge over flood prone sections rather than disturbing sediment and habitat for endangered species and communities. The public deserves to see the costings and details of an environmentally sensitive upgrade and RMS should be providing funds for this to happen. The current solutions put forward are not acceptable.</p>
S132	<p>I was simply horrified by the vegetation clearance necessary even to implement the B1 option. Deep and Middle Creek host such a unique ecosystem and once again we go and solve our self-generated (over sedimentation) little first-world problems with an army of fossil fuel powered machinery (it's just too easy!).</p> <p>Let's redirect that money to more crucial and long terms threats (e.g. costal erosion) or to life-threatening infrastructure (middle-creek bridge) or less eco-impactful recreational infrastructure (council supported MTB natural trail network).</p> <p>Over the last 20 years, my family and I have coped with the WP closures (even if it meant getting late at school or work or not going at all).</p> <p>Saying that, I appreciate the consultation process and the detailed options even though I know that sooner or later the trucks and bulldozers will start their destructive dances...</p>
S133	You say any of the options 2-5 would cause significant environmental damage. I believe the community needs this information in order to make a considered evaluation. Alternately, as suggested by the Pittwater Natural Heritage Association, elevation of the road, bridges and underpasses would seem a better option in view of future flooding due to climate change.
S134	The few times per year of the road being closed does not look like a really significant problem compared to the cost and the environmental impact of the alternatives.
S135	not about the money but environmental impact. please leave this area alone.
S136	It appears B3 is the preferred options due to ability to get to 1 yr event (which is also limited by Oxford Falls options to 1yr even) but no mention of climate change and potential impacts on how events will be affected. This is a major gap and MUST be considered for realistic decision-making and cost-benefit analysis. Disturbance of soils not only damages tree cover but could lead to increased PASS (potential acid sulphate soils), particularly during construction but also ongoing during flooding. Costs must be included to treat and ongoing management. The best option should be to leave flood plain soil in place. Exposure of PASS will kill soil biota and insects, leading to knock on effects of larger animals. It seems remiss that new options, as used in the Netherlands for pontoon roads, are not considered. With climate change we should expect longer dry periods but then more intense flooding - how the options handle this is not discussed. This is poor as remediation post extreme floods needs to be factored in. Having a look at the culverts, there is also costs for handling toxic

	areas (culvert 4) that do not seem to have been adequately costed. Further testing is required for half of the sampled sites
S137	Consider a more environmentally friendly option such as elevating the road.
S138	Do nothing!! The key words are endangered species and temporary solution for millions of dollars
S139	Improve the existing roads, Pittwater Rd leading to Warringah Road and Forrest Way. The natural vegetation alongside Mona Vale Road has already been decimated due to road works. I don't think 5-6 days out of 365 days is an issue. I travel this road 3 days per week to work during peak hour traffic.
S140	The bush next to the Wakehurst Parkway is an environmental sensitive area with lots of endangered flora and fauna species. Also any upgrade will just be a reason for the State Government to push even more housing into the Northern Beaches (as we already see with the Mona Vale Road upgrade), resulting in higher density and more traffic.
S141	Have lived in Avalon for 40 years and never found the closures to be anything but an inconvenience. The thought of tearing through the bush and upsetting the native flora and fauna in such a beautiful area is terrifying. Looking at the destruction on Mona Vale Rd should be a warning to us all. Progress is necessary but sometimes we must take a step back and work hard to preserve what is the most precious part of our area. As a longtime Wires rescuer and carer I'm painfully aware of the serious pressure our wildlife is under. We need to learn to show nature some respect.
S142	The have been enviromental concerns raised. Hopefully the cure i'snt worse than the condition !
S143	This is the only physically attractive bushy road in the Northern Beaches area. We all enjoy the beauty and relaxation every time we drive on it. It would be vandalism to make any changes. It rarely floods and there are alternatives when it does. Leave the beauty alone for us and future generations!
S144	Since Mona Vale road is being up graded to carry more traffic west I'm happy to use that way to visit, for example, the Hospital or Pacific Highway. Wakehurst Parkway can become a little used road when flooded.
S145	I think that flood proofing that road could be achieved without causing environmental carnage but that option was not provided. Protection of the fragile bushland surrounds of Wakehurst Parkway should be a priority not used as collateral damage for a band aid solution. ALL the given proposals involve serious environmental disturbance including a) removal of large areas of bushland and b) exposing contaminated sediments that would need to be treated (the cost of de-contaminating those sediments is not revealed) It is the road that needs to be modified not the surrounding environment. There is no discussion of other solutions to the flooding issues - such as raising the road or building bridges at critical points. The RMS has studied some of those solutions and concluded that they are too expensive but there is no mention of them in the current list of options. The public deserves to know the cost of doing the flood proofing PROPERLY. It is not a satisfactory process to ask the public to choose between bad solutions and worse solutions without revealing the costs and the environmental impacts of a good or better solution. The RMS may say that the water comes from the surrounding environment and that the administrators of the bushland must solve the problems but actually, it is the alignment of the road that has caused the modification of the surrounding environment that now causes the flooding. It is the road that needs to be modified not the surrounding environment. Please reveal the environmental damage in detail and the costs of providing a solution that doesn't harm the environment. otherwise how can the community make an informed decision???
S146	Not necessary to destroy natural vegetation and natural habitats just because some idiots put a hospital in Frenchs Forest.

S147	I believe there is a close correlation between the lagoon entrance closed (blocked) and flooding on the parkway. Your options don't seem to take this into the problem . I'm not picking any of your options , but can not submit this response without ticking one of the boxes.
S149	The upgrade of Mona Vale road to dual carriageway provides a secure all weather transport corridor including a secure route to the new hospital. As a daily user of the Wakehurst Parkway I am comfortable with the present closure frequency particularly knowing an upgraded Mona Vale road will be available. I cannot justify the loss of habitat and tree destruction when an all weather route (Mona Vale road) will exist on the few days a year the Parkway closes.
S150	None of the options sound beneficial. Destroying native lands and environmental impacts are too great. The road itself needs to be raised in flood zone areas, digging up sediment and existing eco systems may cause more damage long term. Road structure needs to be reviewed, possible elevation in parts along existing road where it floods. Destroying habitats isn't the answer.
S151	The road is a State government problem. The options should include elevated roadways and bridges in the flood prone areas. The environment should not be sacrificed for the State government decision to build a new hospital at the end of a single lane, flood prone road.
S152	No mention of the environmental impact of any of the options, which is expected to be significant for all of them (except do nothing obviously). Besides, the cost-benefit analysis does not stack up for any of the destructive options. If you want to do it, do it well and build some sort of overpass where flooding happens. Less damaging and more effective in the long term.
S153	There is no mention of environmental protection for our native bushland or native species in your options. It is World Environment Week and the United Nations is imploring the world to MAKE PEACE WITH NATURE. So DO NOTHING is the only option until Transport for NSW comes to its senses and acknowledges the effects of climate change and over development on the Northern Beaches.
S154	I don't see why you can not just raise the road with bridges in the flood zone parts of the road thus not disrupting the bush land and water ways nearly as much. Council has done a great job with the raised walkways and bridges around the lake for people to enjoy beauty of natural bush and wildlife, why can't they just build bridges/ raised road structure that allows water and wildlife to pass under the road? By altering waterways to the degree in the plans it seems you may alleviate one problem to cause another down the track.
S155	None of the above options see our letter attached. YOU ARE MISSING OTHER OPTIONS BUTTON. / Other comments uploaded
S156	The potential environmental impacts are not worth it. The table discusses impact of construction (short term), but does not address long term impacts of further altering natural water flows and land clearing. Any options proposed and considered by Council should result in enhancement of the local environment, not what our tolerance is for further degradation. Land clearing and dredging in particular are so destructive that the natural ecosystems will not recover in a reasonable time frame, and puts undue pressure on an already restricted ecosystem in the middle of Sydney's urban environment. Additionally, people do accept the flooding as a consequences of their choice to live in such a beautiful and natural part of Sydney.
S157	Wake up, climate change is real and destroying bushland for a bandaid solution that doesn't work won't fix the problem 1. None of the presented proposals will prevent ALL flood events along the Wakehurst Parkway, particularly if you take into account the increasing frequency of flood events predicted due to Climate Change. 2. In common parlance, the proposals are "Band-aid Solutions" that fit within the given budget provided by the Roads and Maritime Services (RMS) for now. 3. Wakehurst Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a crucial link that needs to be properly funded by State Government. 4. The Council has been requested to provide solutions that involve using the surrounding bushland - letting the RMS off the hook from having to do anything about the road itself.

	<p>5. The RMS may say that the water comes from the surrounding environment and that the administrators of the bushland must solve the problems but actually, it is the alignment of the road that has caused the modification of the surrounding environment that now causes the flooding. It is the road that needs to be modified not the surrounding environment.</p> <p>6. The flooding occurs at several different locations along the Wakehurst Parkway.</p> <p>7. ALL the given proposals involve serious environmental disturbance including</p> <p>a) removal of large areas of bushland and</p> <p>b) exposing contaminated sediments that would need to be treated (and the cost of de-contaminating those sediments is not revealed)</p> <p>8. There is no discussion of other solutions to the flooding issues - such as raising the road or building bridges at critical points. The RMS has studied some of those solutions and concluded that they are too expensive but there is no mention of them in the current list of options. The public deserves to know the cost of doing the flood proofing PROPERLY.</p> <p>9. If the road were elevated by bridges, animals could move through underneath. The road needs to be redesigned to allow for animals to move safely from one area of bushland to another.</p> <p>10. It is not a satisfactory process to ask the public to choose between bad solutions and worse solutions without revealing the costs and the environmental impacts of a good or better solution. What are the actual economic and environmental costs? Stop hiding information from people who don't know to ask for it</p>
S158	I don't think anything should be done.
S159	At the present time I am alarmed at the impact all of the 5 options will have on native species of plants and animals, including aquatic species. The obvious way to mitigate flooding is to elevate the road, which would allow for movement of water and animals below the road. Road kill would also be minimised. Is this far to expensive? Option 5 is \$17.5 million and even this will not eliminate flooding entirely. I think the costs involved in road elevation should be made public, after all, most of the construction could be manufactured off-site. Another option could be to re-route the road, leaving the flood-prone sections to re-vegetate. I believe any half-baked changes would be detrimental to this wonderful public and natural resource.
S160	I think the reduction in days closed aren't worth the environmental damage. Especially as there are other alternative routes.
S161	Potentially spending \$17.5 million on something that occasionally causes a minor inconvenience a couple of times a year is a waste of money. Especially when the proposals have such a huge environmental impacts on threatened native plant and wild life. I didn't see anything in the proposals around how the native wild life, plants and aquatic life would be regenerated and encourages back after the work has been completed. This has too big of an environmental impact. People need to toughen up and take the long way round once in a while, a minor inconvenience a couple of times a year is a small price to pay compared to the huge environmental impact this proposal would have. That money would be better placed going to other causes and services on the Northern Beaches.
S162	It is our community's responsibility to protect our precious eco-systems from human impact. For the amount of days per year the Parkway floods, taking such drastic action is incomprehensible. Do nothing.
S163	I chose this opinion since even the minimal impact option still require a huge destruction of native vegetation and impact to threatened species and ecosystems.
S164	Thank you for requesting community input. The impact on the natural environment seem too high to me
S165	The environmental impacts of the other options are too great. Construction and truck movements will cause far greater disruption than the few times a year it floods.
S166	The bushland in this area is already heavily fragmented and limited in its ability to provide protection and habitat for native flora and fauna. We already have so little healthy bushland and an increasing amount of threatened plant species. The impacts of the clearing for extra drainage do not outweigh the costs.
S167	There will be a huge Cost and environmental impact and regardless of what option is decided there will still be some road closures due to flooding.

S168	The environmental impacts are too great for any improvements . People of the northern beaches value their environment more than the roads, if they valued the road they would live else where
S169	The most obvious solution is to build a new raised road/bridge over the current road to avoid any loss of animal habitat and trees in the area.
S170	<p>A plan that alleviates the need for road closures due to flooding during rain events needs to be devised.</p> <p>The options proposed do not do that and are therefore not acceptable.</p> <p>Any plan, considering the negative impact of change to the environment, needs to be long term effective.</p> <p>It is a critical link that needs to remain open during rain events. Access to the Hospital given the closure of Mona Vale is the top consideration in order to ensure lives are not put at risk.</p> <p>This decision needs to be thorough and effective, not a 'sometimes' solution which the options presented are. The investment needs to result in success, not just a bit better.</p> <p>I reiterate that my selection of 'do nothing' is selected only because there was no better option. Those presented being unacceptable, an appropriate option needs to be presented to the community for comment.</p> <p>Thank you</p>
S171	<p>The options presented other than Option 1 provide too significant an impact to the local environment including excessing threatened species impacts and vegetation clearing. Whilst I can understand why Council considered Option 5 the best outcome, I do not see value for money in spending over \$17million dollars to cause such significant environmental damage to still have closures ever two years.</p> <p>Why have bridging options not been presented? We all understand that these would be significantly more expensive, but it is irresponsible to not present all options to the community for its consideration.</p>
S172	<p>Protect the environent and leave the Wakehurst Parkway and surrounding area as is. As you have stated, any works will only have a minimal impact on closures(eg stop 6 closures per year) and those who use it have an alternate way regardless.</p> <p>We need to protect the environment, bushland, vegetation and local animals</p> <p>Maybe spend the money on cleaning the rubbish off the side of the Wakehurst Parkway instead. Its terrible</p> <p>Save the money on cleaning up the bushland. On top of a ridge at cromer heights is a massive gazebo that needs to be cleaned up. Call me for more details</p>
S173	<p>Do nothing of the suggested options - instead ELEVATE THE ROAD AND BUILD BRIDGES and especially do not remove bushland - instead include ability for wildlife to cross underneath the road/bridges.</p> <p>The money can be found to elevate the road and build bridges.</p>
S174	I think the environmental and economic costs of permanently flood-proofing the road ought to be revealed and discussed before any decisions are made. I want a solution that is best for the environment, including the animals, and none of yours are so far.
S175 / S508	<p>Comments received: 1/6/21 (S175)</p> <p>None of the proposed solutions will properly solve the flooding problem. It is not the surrounding area that needs to be modified it is the Wakehurst Parkway which needs to be modified by raising some sections or provide bridges where needed (this will also help animals to pass under the road instead of being killed)</p> <p>Comments received: 25/6/21 (S508)</p> <p>Wakehurst Parkway Flood Mitigation</p> <p>I would like to have the Parkway raised where necessary and widened to 4 lanes. By raising the carriageway on piers on low spots, any flood can pass under the carriageway and none of the vegetation has to be disturbed.</p> <p>Regards</p>
S176	Option 1 - No impact to the environment please. Thank you.
S177	Conservation of the corridor is paramount. Flood events are rare.

S178	<p>THE ENVIRONMENTAL DAMAGE TO A UNIQUE SCENIC ROADWAY WILL BE ENORMOUS WITH MINIMAL BENEFIT.</p> <p>I HAVE LIVED AT AVALON FOR OVER 30 YEARS AND HAVE BEEN AT BAYVIEW FOR 7 YEARS. I WOULD RATHER ACCEPT THE INCONVENIENCE OF OCASIONAL CLOSURE OF WAKEHURST PARKWAY IN HEAVY RAIN THAN HAVE THE WHOLE AREA TRASHED FOR A BENEFIT THAT IS LESS THAN 100% EFFECTIVE.</p> <p>ONCE MONA VALE ROAD IS COMPLETED THERE WILL BE EVEN LESS NEED FOR A LANDSCAPE SCARRING SOLUTION TO WAKEHURST PARKWAY FLOODING.</p> <p>THE ACCESS TO WAKEHURST PARKWAY FROM NORTH NARRABEEN IS SO POOR THAT IT IS CURRENTLY QUICKER AT MOST TIMES OF DAY TO GO UP MONA VALE ROAD.</p> <p>DO ANY COUNCIL REPRESENTATIVES OR STAFF TRY AND ACCESS WAKEHURST PARKWAY FROM THE NORTH DURING MORNING PEAK HOUR OR SCHOOL ZONE TIMES??????</p> <p>I AM SURE COUNCIL COULD FIND A BETTER USE OF ALL THAT MONEY- KEEP NARRABEEN LAGOON OPEN TO THE SEA.</p>
S179	<p>We have responsibility to keep the area in its unique state- such a beautiful tract of land. Once you change water courses the land is never the same. Keep all trees unless they are in a danger of falling on passing traffic.</p>
S180	<p>Put the road on a raised bridge. No flood closures and the animals can cross underneath safely.</p>
S181	<p>Inconvenient as the flooding is, I would be sad to see any significant clearing done As it is such a beautiful drive. I would also prefer not to lose any of the endangered Species of plants.</p>
S182	<p>Why not just raise the road level.???</p>
S183	<p>nONE OF THE ABOVE. JUST RAISE THE ROAD PAVEMENT IN THE AREA WHERE THE EXIASTING FLOODING OCCURES. IN A SIMILAR MANNER TO SEEN ON MANY WALKING TRAILS WHERE THE WATER IS ALLOWED TO FLOW UNDR THE RAISED PLATFORM . THE PACIFIC HIGHWAY AROUND THE YAMBA AREA HAS BEEN TREATED LIKE THAT.</p>
S184	<p>Option 2 - 5 involve spending money with no resolution of closures (although they are diminished). Disruption to community is minimal with 5 -6 closures a year. We need to protect and retain the area.</p>
S185	<p>Retain and protect the natural environment of Wakehurst Parkway to preserve habitats for local Flora and Wildlife. Don't destroy remaining native areas in the name of progress - once it's gone it cannot be replaced. Instead improve other traffic corridors so they cope with increased traffic during flood closures of Wakehurst Parkway. Future generations will be eternally grateful for the legacy of retaining the unique unspoilt natural environment of Wakehurst Parkway.</p>
S186	<p>Not worth impacting the environment for inconvenience of 6-7 floods per year</p>
S187	<p>Too many trees are being cleared in the Northern Beaches region. Time to start protecting our beautiful environment above all else. Do not remove any trees on Wakehurst Parkway, find another solution or live with it as is.</p>
S188	<p>The radio buttons above don't provide for all possible options so I have indicated 'Do nothing' and will detail my response here. O2 & S1 look reasonable, B7 looks like a good option by providing the best drainage to let water pass the obstruction of the road while minimising impact on native vegetation, the minimal disturbance will be much easier to sell. Sediment that may have built up on the upstream side of the road due to the reduced peak flow rates caused by the obstruction created by the road and limited culver capacity may then naturally migrate downstream with the higher volume peak flow enabled by the improved drainage, so natural processed will give you the same result as proposed by other options involving more significant disturbance and cost.</p>
S189	<p>Too much environmental impact with current options.</p>
S190	<p>No trees to be lost</p>
S191	<p>Can we please have a raised roadway here. It is done in other environmentally sensitive sites, around this state and in others. This is not in the option list. The options seem to all have vast vegetation clearances impacting fauna as well. Allowing animals to cross under the roadway is preferable and safer for drivers. Forget your culverts and embankments and put the roadway up above ground level.</p>

	<p>Why are we only given cheap options? The state govt made this worse by closing Mona vale hospital and having an inadequate road infrastructure for accessing the new hospital. Bridge the road and fix it properly for local residents, the fauna and flora of the area. A bridge would allow the ecosystem of middle creek to be maintained. It is the best option.</p>
S192	<p>Please consider the 'do nothing' option strongly. All other options seem like a hell of a lot of money to spend on alleviating some sporadic inconveniences for motorists at the expense of significant damage to the environment. With more and more people taking on flexible working, and this route not being the only route out of the beaches for northern residents, it seems that it is overkill to spend this much money on addressing these flood issues. Not everything needs 'fixing'.</p>
S193	<p>Road closures are not as important as preserving local habitats and threatened swamp trees. I am curious if any other road or drainage options could be considered.</p>
S194	<p>All options require the removal of a lot of native vegetation and risk to the endangered flora and fauna and its hard to support, however, if there is no other alternative and work is to go ahead I be in favour of Option B1. My feelings are non of the options are worth the effort to cut the closers down significantly and I was hoping a raised road with less impact was possible for the bends</p>
S195 / S505	<p>Comments received: 28/5/21 (S195) The best permanent solution would be to elevate the road over flooded sections allowing native animals to pass underneath when dry. Comments received: 28/5/21 (S505) The best solution would be to elevate the road over flooded sections allowing native animals to pass underneath when dry.</p>
S196	<p>The duplication of Mona Vale mitigates against the need to undertake this work. The impact on the environment is to too great to justify the proposals. Spend the money on duplicating the section south of Dreadnought Rd.</p>
S197	<p>I am in favour of not disturbing the current area so that the native fauna and flora are preserved. Closing approx 6 times a year is a small price to pay.</p>
S198	<p>The sheer cost and environmental damage associated with all other options, with apparent limited public benefit, should make it apparent to anyone that no action should be taken. Where is the estimated economic impact per closure for a proper assesment to be made?</p>
S199	<p>Leave the environment as it is</p>
S200	<p>Do nothing until northern beaches tunnel built and include widening to four lanes with causeway over the bends section from Seaforth to Narrabeen. Building two lane culverts now will be short term and not benefit wildlife & threatened plant communities. The causeway would allow better natural drainage and fauna egress.</p>
S202	<p>Enough clearing of habitat.</p>
S203	<p>To Whom It May Concern, Formed in [REDACTED] is a volunteer-led community group from the Northern Beaches which is concerned with the preservation and regeneration of canopy in the Pittwater area. We represent the wishes of a growing number of residents who are concerned with the loss of trees in our area. With regards to the Wakehurst Parkway Flood Mitigation proposal, we wish to request the Council to DO NOTHING – i.e. to hold off on any development of the Wakehurst Parkway, at least until such time as the State Government pledges the necessary funds to actually fix the problem, and in a way that causes minimal ecological disturbance. The proposed options B5, B2 + O1, B3 + O1, and B3 + O2 + S1 are incomplete solutions that will fail to actually solve the flooding issue. Meanwhile, all of them will inflict serious damage on the Narrabeen Lagoon and parts of its Catchment. 1. STATE GOVT SHOULD PROVIDE FUNDS The Wakehurst Parkway is a state road, and therefore local council should not be expected to foot</p>

	<p>the bill for its upgrade. This is especially clear in light of the State government's decision to defund the Mona Vale Hospital – a decision which left the Northern Beaches population reliant on the unreliable Wakehurst Parkway for hospital access. The State government should foot the bill to make up for this error.</p> <p>2. SERIOUS ENVIRONMENTAL DEGRADATION</p> <p>We are concerned that all the options described in this proposal will inflict irreparable damage on the ecosystems in and around Narrabeen Lagoon, with far-reaching and unpredictable ecological ramifications. We are primarily concerned that:</p> <ul style="list-style-type: none"> a) The biodiversity of the area will be affected. The proposals will impact the threatened ecological communities of Swamp Sclerophyll Wetlands, Freshwater Wetlands, Swamp Oak Floodplains, and Coastal Saltmarsh, which are some of the most biodiverse ecosystems in Greater Sydney. They provide habitat for nationally threatened species including the Giant Burrowing Frog, as well as numerous NSW threatened species including Powerful Owl, Greater Sooty Owl, Barking Owl, Red-crowned Toadlet, Black Bittern, Glossy Black-Cockatoo, Squirrel Glider, Grey-headed FlyingFox, Eastern Bentwing-bat (all confirmed in the area), as well as Southern Brown Bandicoot, Koala, Spot-tailed Quoll, Swift Parrot, Masked Owl, and Australian Little Bittern (unconfirmed occurrence). b) The exposure and release of contaminated sediments into the environment will have far-reaching effects for the Lagoon and the forests that surround it. c) The estimated cost of decontamination is not available for the public to review. d) The clearing of bushland will involve the cutting down of trees that not only have significant ecological value, but also cultural value to the Northern Beaches community. Some of the species in this area are locally significant (Bangalay, Swamp Mahogany) and/or threatened. e) The area's indigenous heritage is significant, and it is unclear from the proposal what the effects of the described options will be for this heritage. f) The obstruction and redirection of water courses will alter habitats and ecologies in ways that are both irreversible and unable to be holistically understood or pre-empted. g) The dredging of sediments, the destruction of natural wetlands, and the removal of bushland and trees will release CO₂ and other Greenhouse Gases and negatively impact the global climate. The Council has declared a Climate Emergency, and Pittwater Canopy Keepers supports the Council to act in accordance with this declaration and protect ecological assets. These assets can be understood as valuable infrastructure for buffering against climate disasters and sequestering emissions. Wetlands in particular are known to be some of our most important carbon sinks. <p>3. TRAFFIC OBSTRUCTIONS CURING CONSTRUCTION</p> <p>We also reject the proposals on the traffic disruptions construction will cause. Many residents would prefer to have the parkway closed every now and again during flood events, than to have ongoing obstruction and disruption over the coming months. 40+ weeks of construction with temporary and partial road closures and significant truck activity is – for many people – much more of a nuisance than a few wet days a year.</p> <p>4. SAY NO to all the described options and CONSIDER OTHER OPTIONS</p> <p>It is not a satisfactory process to ask the public to choose between bad options and worse options without revealing their true fiscal and ecological costs.</p> <p>Please reconsider this project with new options when the State government has pledged enough money to build proper bridges at critical points, or, better yet, to revitalise Mona Vale hospital, so that the health of the local community no longer impinges on an unreliable road.</p> <p>Sincerely</p>
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S204	<p>I would rather leave the Parkway as it is. We have lost so much natural vegetation as it is, that to remove more would be sinful.</p> <p>Yes, it is inconvenient when the Parkways is closed and there is subsequent traffic build up - but it does not shut down the Northern Beaches.</p> <p>Please don't trash the area</p> <p>Regards</p>
S205	<p>Dear Sir / Madam</p> <p>Please find attached a submission re Wakehurst Parkway Flood Mitigation Options.</p> <p>My apology that the submission is a day late.</p> <p>I hope that the comments will be considered.</p> <p>To: Northern Beaches Council</p> <p>Wakehurst Parkway Flood Mitigation Options - Submission</p> <p>My preference for options to reduce flooding on Wakehurst Parkway is Option 1: Do Nothing. The remaining Options B2, B3, B4 are likely to have a significant impact on the environment.</p> <p>The main focus of the Flood Mitigation Options is to reduce the incidence of flood events in order to avoid traffic diversions and inconvenience for road users. Although this outcome has merit, on balance I prefer to assign a higher priority to protecting the environment.</p> <p>REASONS to SUPPORT Option 1:</p> <p>Duration vs Frequency</p> <p>During 2007 and 2014 Wakehurst Parkway "was typically closed six to seven times per year as a result of flooding, with a median number of closure incidents of five per year."</p> <p>On average the closure time due to flooding is 5.1 hours. For individual flood events the closure time varies considerably between 10 minutes and 2 to 3 days.</p> <p>The perceived benefit of the Options is greater when we look at reducing the number of flood events per year. However, the actual benefit needs to take into account the estimate of time (hours or days) when the road is likely to be closed during the more frequent flood events. Within a year the cumulative time during which Wakehurst Parkway is closed is comparatively small.</p> <p>The Flood Mitigation Options will not eliminate flooding; Wakehurst Parkway is still likely to flood during large storm events. The frequency of these incidents is likely to increase over the years with climate change. "The present study has not taken account of climate change (potential increase in rainfall intensity) or sea level rise."</p> <p>Extent of Sediment Removal "The Bends Culvert 'sediment removal option' has the greatest impact to biodiversity.</p> <p>Approximately 2.3 ha of native vegetation and associated fauna habitat would be impacted by this option." The extensive removal of sediment and vegetation in the flood plain would result in significant soil disturbance and loss of biodiversity.</p> <p>Environment</p> <p>The sediment removal and culvert options would have a significant impact on flora, fauna and fish habitat. Soil disturbance has the potential to release or expose land contaminants and acid sulphate soils. The project will risk reduced water quality in Narrabeen Lagoon and a decline in fish species.</p> <p>Water quality</p> <p>Sediment removal and culvert upgrades will result in adverse impacts and unknown risks to water quality in Middle Creek and Narrabeen Lagoon. "Removal of vegetation has the Page 2 of 3 potential to increase sedimentation downstream at Narrabeen Lagoon potentially impacting on water quality there through increased turbidity and settling of sediments."</p> <p>The risk of deterioration in water quality in Middle Creek and Narrabeen Lagoon is a health and environment issue.</p> <p>Cost /Benefit</p> <p>The cumulative time during which Wakehurst Parkway is closed due to (say, 7) flood events is around 36 hours per year. This is only 1.5 days out of 365 days – a small fraction of the year.</p> <p>By comparison, the adverse impacts on the environment will affect biodiversity, wildlife, waterways and the flood plain ecology for every day of the year and potentially for many years to come.</p> <p>The benefit of the proposed Flood Mitigation Options is easily quantified in terms of reducing the incidence of flood events during the year. However, preserving the environment has multiple</p>

	<p>benefits that are difficult to quantify.</p> <p>Also, the financial cost of the Flood Mitigation Options is quantified, but the cost to the environment is incalculable and based on the value assigned to biodiversity.</p> <p>Funding and resources</p> <p>The flood mitigation project will consume a lot of time, expertise and money – including the time and expertise of Council staff and consultants. The project has the potential to divert resources from other projects with an environmental focus.</p> <p>Alternatives (Environment)</p> <p>Incremental removal of sediment – on a trial basis. Apply funding to the incremental removal of a small amount of silt / sediment upstream of the Bends on a trial basis. A precautionary approach is preferable to a broad scale sediment removal as proposed.</p> <p>The existing floodplain has high conservation values for biodiversity, native flora and fauna.</p> <p>Funding for environmental and catchment protection is a priority to prevent the further loss of biodiversity and to avoid increased erosion and sedimentation in waterways.</p> <p>Catchment management-based options include creek restoration to minimise sediment generation</p> <p>Alternatives (Transport)</p> <p>Alternative transport: An ‘amphibious’ type vehicle capable of traversing low level flooding (depends on flow) could provide a public transport and shuttle bus service during flood events.</p> <p>The Bends: A temporary bridge to allow for waterway and fauna passage underneath.</p> <p>A temporary bridge could consist of portable ramps and platform sections elevated on supports within the existing carriageway. Structural engineering input required to assess feasibility. Page 3 of 3</p> <p>Bridges</p> <p>“The raising of Wakehurst Parkway in key locations and corresponding culvert upgrades appeared to provide a longer-term sustainable option”. This option has not been pursued due to the “significant capital cost and likely environmental impacts”. However, no details have been provided. As a consequence the feasibility of a low cost, low impact bridge has not been ruled out.</p> <p>State Government (RMS)</p> <p>It would be a mistake to encourage the RMS to undertake an expensive upgrade that involves conventional road construction and widening Wakehurst Parkway. Road widening would require extensive clearing of vegetation and is likely to have a devastating impact on the sensitive environment of Middle Creek Valley.</p> <p>Since 2014 over a billion dollars has been spent in the Northern Beaches on road widening along Warringah Road and Mona Vale Road, but there has been no adequate compensation for the loss of biodiversity associated with these roadworks.</p> <p>Catchment Protection</p> <p>In relation to flood mitigation a high priority is to protect land upstream including natural areas and slightly degraded land. Protecting bushland areas within the catchment has long term environmental benefits downstream.</p> <p>Oxford Falls – Peak flow and flood events could be reduced via upstream mitigation measures, including bush regeneration, to increase infiltration. This would also enhance the wildlife habitat and corridor in Nandi Reserve.</p> <p>Sports Academy – This section is not affected by the small flood events and road closure due to flooding is relatively infrequent. Flood mitigation options that have a significant environmental impact may not be justified in this instance.</p> <p>Thank you for the opportunity to comment.</p>
S206	Details of my comments are outlined in the attached document.
S207	I chose this option on the basis that there was the lowest impact on ecosystems in the area.
S209	Endangered species must be by far the top priority in any work done in this beautiful area of Sydney

S210	My preference is for B1, given the significant environmental impacts from the other options. B2 is probably the most pragmatic option, however, it is difficult to assess the impact options given that there are up to 15 impacts listed, but the report itself notes that more research is required, and the impacts are going to be larger than those stated. Without those assessments, even B1 is a difficult option to support. S1 is completely unnecessary, given Table 1 spells out that the "flooding" is at worst a 23cm, 1-in-2 year event, and that level of flooding poses a low risk, and even then only to small, compact vehicles. I'm opposed to both O1 and O2, as they are also largely unnecessary, and seems to be really only for those, Hillsong, the school and those who use Oxford Falls Road W to access the Parkway. Those residents and businesses know that area is prone to flooding, and given the age of the development in the area, would have known prior to purchasing properties there. Spending \$1.4M - \$1.8M of public money to fix a problem that they know existed before moving there is unacceptable.
S211	With Mona Vale road works improving the exit options from the peninsula and the completion of works at Forest Way and Warringah roads northern traffic has less need to use the parkway during flood times. Increased work from home also has reduced the traffic volume using the parkway.
S212	The WP closure is frustrating no doubt but part of living here (and I commute to the city using this road). Feels completely excessive to spend such an amount and also given the environmental impacts
S213	I have no issue managing 4 closures per year in order to protect the native wildlife and the vegetation.
S214	The disruption to through traffic in the other options to B1 is greater than the inconvenience caused through flooding. The the additional cost is also significant for the small benefits achieved.
S215	This unique pocket of natural environment must be preserved. Do not sacrifice it for a couple of days of inconvenience. Minimal intervention will be seen as giving some ground to anti-conservationists which could shut them up hopefully. They can catch the wonderful B- line bus.
S216	In the not too distant futures, the Wakehurst Parkway will need widening & upgrading regardless of the flooding situation. I would not like to see large amounts of money spent on a makeshift flooding fix rather a major future roadwork plan covering all issues.
S217	I have chosen B2+O1 as I think they provide the best balance between flood mitigation and environmental disruption plus cost. If the Parkway closes twice a year for a day that really isn't a big problem for the community. I am concerned that at least 27 hectares of vegetation will be cleared which risks fundamentally changing the character of the Parkway which is very much part of what makes the Northern Beaches a special place. It is a beautiful road which I do not want to see turned into a concrete highway. I do not want to see another "Mona Vale Rd" which is now an ugly scar across the landscape. I appreciate there would be a plan to revegetate, but I fear it will not be the same and the cost of gaining a few days a year when the road does not flood will be too high in terms of amenity and the permanent damage that will be done to threatened ecological communities. So, not "do nothing", but we must tread as lightly as possible on our unique environment.

<p>S218 / S529</p>	<p>Comments received: 4/7/21 (S218) I believe any changes to the Wakehurst Parkway needs to have suitable protection for native wild animals and bush land. This would either include underpasses or overpasses for native animals to cross the parkway and avoid car accidents and protect wildlife. There would need to be fences as well to avoid the mentioned accidents. There need be more than two or three protected crossings. One isn't enough. In addition any lost habitat will need be replaced in another location. Maybe extend current protected areas as enough land has been lost due to development. If none of these suggestions are included I'm against any further development on the Wakehurst Parkway as enough bush land on the northern beaches has been lost or is under threat due to Northern Beaches tunnel or residential development. Regards</p> <p>Comments received: 4/7/21 (S529) Hi, I believe any changes to the Wakehurst Parkway needs to have suitable protection for native wild animals and bushland. This would either include underpasses or overpasses for native animals to cross the parkway and avoid car accidents and protect wildlife. There would need to be fences as well to avoid the mentioned accidents. There need be more than two or threeprotected crossings. One isn't enough. In addition any lost habitat will need be replaced in another location. Maybe extend current protected areas asenough land has been lost due to development. If none of these suggestions are included I'm against any further development on the Wakehurst Parkway as enough bush land on the northern beaches has been lost or is under threat due to Northern Beaches tunnel or residentialdevelopment. Regards</p>
<p>S219</p>	<p>Thank you for the opportunity to have input to the options to reduce flooding on Wakehurst Parkway. My thoughts are that Option 3 B2 + 01 is the preferred option as it seems sensible to upgrade existing culverts, make a new levee bank and remove 1 metre of sediment upstream of the bends. The cost of \$7m seems better value than Option 2. Having road closures x 2 average / year seems a better option than the current average of x 4 / year. However, I also feel that Option 4 B3 + 01 at \$13.3m resulting in x1 closure / year, may be worth the money, but as these projects very often result in unexpected complications and usually end up costing a great deal more, I am reluctant to make this option. I do not see that Option 5 has any real benefits to the major traffic movement on Wakehurst Parkway. I am also VERY CONCERNED WITH ANY LOSS OF TREES, or other changes to the environment in this precious area, and I would like to know, and be reassured about any environmental loss and impacts all of these options.</p>
<p>S220</p>	<p>Similar to the Lagoon Plan, the flooding concerns on Wakehurst Parkway are dependent on the depth of the lagoon. Each year the lagoon is affected by increased sediment from stormwater drains, sand from the beach and a reduction in the amount of dredging in recent years. This had led to increase in erosion and recent flooding along the lagoon in areas such as outside the Lakeside park, Lagoon reserve, Woolworths Carpark, the boatshed near Devitt Street, Mactier Street, Cromer Gold Course area and Middle Creek. Consistent dredging is required in these areas to mitigate the risk of flooding and residents affected in these areas. The sand can be used to restore areas of Collaroy & South Narrabeen beaches, it is a win win for the beach and lagoon residents and will reduce the amount of Wakehurst Parkway closures.</p>
<p>S221</p>	<p>With this action an evaluation of what road closures may be and allow further assessments made if needed.</p>

S222	<p>I would agree to option 3 with amendments. (No sediment removal) Oxford Falls Road The existing culverts are far too small to accommodate the volume of water that flows through the Oxford Falls section which in heavy rain cuts off Wakehurst Parkway near the school, this also affects Morgan Road. "The Bends" The current culverts located at the "The Bends" are also far too small for such a large body of water. As they are too small to cope with the volume they block very easily causing the water to spill over the road. As the suggested plans indicate, building a small wall on either side of the road and increasing the size of the culverts will allow for the water to disperse into Middle Creek. I agree with this as a solution as it will stop the water build-up on the road. Excavation I oppose the excavation of the sediment, from Oxford Falls Road down to Middle Creek. The only method used to achieve this would be destructive to the existing environment which would have an immediate impact on the native species of "flora & fauna". This corridor is a breeding ground for 15 species of native wildlife some of which are already on the endangered list, deeming this far too precious an area to damage. Suggestion for Morgan Road and "The Bends" The best solution for both areas would be to create a bridge above the watercourse in both cases.</p>
S223	<p>Relying on a levee to protect the road is almost useless. The road needs to be raised to a level above the flood level with several culverts under the new road to allow floodwater from the southern side of the road to enter the main watercourse/</p>
S224	<p>Morgan Road causeway should not be altered. Traffic was not intended to use this access way. Traffic should take the Frenchs Forest route when flooding occurs. Wakehurst parkway should be widened</p>
S225	-
S226	<p>My thoughts are that it would be a considerable waste of money completing Option 5 as there won't be a 100% guarantee of no closures- As nature can't be controlled. Use the taxpayers money for something else I also believe that it would be a crying shame to remove all the vegetation to no practicable end. Bearing in mind all the natural habitats and ecosystems that would be gone forever. Accepting of the fact that some work done on it would go a long way, hence my choice of option 3. Thankyou for your time in this debate.</p>
S227	<p>The local wild life need the environment left as is with some under the road pipes to allow water to drain away, these could also be use to allow wildlife to cross under this very busy road instead of being decimated by fast moving traffic. People just have to get used to driving the long way round twice a year.</p>
S228	<p>Ecological significance is important. Many roads flood from time to time. Road closure warnings / road conditions advice is well managed these days.</p>
S229	<p>Even with the most expensive option, the road will be flooded at times.</p>
S230	<p>How about allocating some of the funds from Parks for the People towards this project then Council would be able to afford Option 5</p>
S231	<p>Upgrading culverts and clearing sediment downstream of culverts and upstream of the bends would significantly reduce the impact of flooding. I find it acceptable that the road closes maybe twice per year as there is an alternative route and usually it is only for half a day. Upgrading of the culverts would increase their capacity to discharge water under the road, clearing sediment downstream will allow water to egress quicker. This option is far cheaper and less environmental impact.</p>
S232	<p>Option 3 (B2) in my opinion is the better solution for the Wakehurst Parkway ; it has less impact on the surrounding area so long as there is not large scale tree clearing to facilitate the work. Upgrading the culverts or better still adding new ones would enable wildlife to cross this very busy road. regards,</p>
S233	<p>Minimum environmental impact and liveable average flood per year forecast.</p>

S234	Best value for money
S235	Option 3 at cost of 7m p, resulting in two closures per year, seems reasonable as long as the work can be completed with minimal impact on traffic movements during peak hours. I do not live in the immediate area and would differ my view in favour of those directly impacted by the proposed works. I would like to know if it could be advantageous to undertake weed eradication work at the time of the remediation.
S236	My own assessment is that a good deal of the problem with flooding of the Parkway is caused by water 'banking up' in Narrabeen Lagoon after significant rain because it cannot readily exit to the ocean. I suggest therefore studies into a combination of option B2 plus significant improvements/works where the Lagoon exits to the ocean.
S237	If this option is \$10,000,000 cheaper and there is only one extra closure per year save the money
S238	Seems best cost benefit ratio
S239	Maximum impact for the money spent
S240	The fewer closures to the Parkway the better. We are lucky so far that no deaths have been reported as a result of emergency vehicles not getting access during floods/critical times. As a regular user of the Parkway travelling to Mona Vale and Bilgola Plateau, it is a laughable situation to think that this road that was created in the last century is still at last century standard and state government can't find the funds to bring it up to speed and that the local government instrumentalities are burdened with the majority of the costs
S241	The Wakehurst Parkway is a road I use frequently in travelling to and from Mona Vale. It is a state road built in an area that floods naturally. It is therefore a matter for the state to manage and to provide finance for any changes. The options we are asked to consider would cause much disturbance and destruction of bushland. This at a time when we are becoming aware once more of the value of bushland to us and the necessity to live with nature rather than trying to dominate it. All the proposals above concern mitigation of the flooding problem. We can bridge those parts of the Parkway that flood so that it never has to close. This might be more costly at the beginning (though the proposals we are asked to consider clearly contain hidden costs) but it would answer the problem for the future. If the bridges were raised above the level of the land it would allow wildlife to move around freely. We are also being forced by circumstance to recognise the value of wildlife in maintaining the environment in which we all live. Above all, we must retain the bushland that we have and not desecrate it in pursuit of short-term savings.
S242	It seems as though none of the choices are optimal. is there any way the road can be raised over the current road so that animals, flood water can pass underneath? The best option of those listed is 4 even though it includes a lot of environmental damage.
S243	Last option seems overkill given still has closure risk
S244	Try to minimise the impacts on the trees, wetlands and any wildlife. Endure protection of aboriginal sites
S245	Option 4 should be designed for future amplification if needed. A reduction of 1 closure in two years for Option 5 not worth \$4million and increased environmental impact.
S246	Something should have been done 40 years ago.
S247	With option B4 it is not clear that the access for material removal would be 'integrated' into the environment as well as supporting ongoing maintenance etc. for future years vs the option 4. Land always moves, a combination of the Physics behind it, Will the material removed be used and will consideration be made for effective capture of any buried carbon decay. Use for other sinks. A topographical map of the model and works would assist in presenting.
S248	We also need to address a dual lane road
S249	This will help in continuous flow of water towards culvert even when flash flooding

S250 / S274	<p>Comments received: 30/5/21 (S250) Yes upgrade the existing culverts. Put in new ones where needed . Clear the high bank of the road. Also get excavators to make more drainage from the side of the road.</p> <p>Comments received: 29/6/21 (S274) The Best.</p>
S251	We need the option that has the minimum effect on the local environment. Trees and native flora and fauna need to be considered.
S252	Draining the southern flood plain south of the bends at the levee by raising roadway to accommodate larger piping under road then think about diverting Middle creek away from Wakehurst parkway. If anyone has paddled Middle Creek from the eastern end they would find much of it has been obstructed by fallen trees & undergrowth. If care was taken to remove a great deal of these obstructions it would greatly improve flow into Narrabeen lagoon thus easing pressure up stream. Sediment removal & vegetation snags are vital to success of this project. Maybe a few days with a D9 bull dozer would achieve wonders for us long suffering Narrabeen residents. Any work undertaken must also include a more positive approach to maintaining the entrance to the ocean at North Narrabeen because the current plan is totally inadequate.
S253	<p>Firstly, as this road is the quickest and most direct path from the upper Northern Beaches to the Hospital, we should be aiming for zero days closed due to flooding. The road should be considered absolutely critical to our residents for access to emergency medical care. What about a low level elevated road above the existing road. Whilst travelling in everglade areas in the US, they have a great number of roads which are basically elevated roads about 2m above the surrounds. I'd imagine that much of this kind of road could be pre-fabricated, reducing build time and local construction impact. Also, as these low elevated roads sit above the existing roadway, the environmental impact would be quite low. Flooding should simply pass under the elevated roadway, and flora and fauna would likely thrive with greater access. Thanks.</p>
S254	Surely 2 closures a year would be manageable?
S255	I prefer bridging the flooded sections of the Wakehurst Parkway and submit the attached report.
S256	<p>The best option is to have the Parkway open more often than not, the communities should not have to take alternative routes when the Parkway floods. The reasons are for economical, social and health reasons. (Our main hospital for the beaches is located at Northern Beaches Hospital) I understand that there will be environment issues but feel that the well-being of the residents on the peninsula should take precedent. The nature vegetation that this proposal will affect over time will be restored.</p>
S257	Option 5 provides best protection.
S258	<p>None of the presented proposals will prevent all flood events along the Wakehurst Parkway, particularly if you take into account the increasing frequency of serious storms and flood events predicted due to Climate Change. The flooding occurs at several different locations along the Wakehurst Parkway. There may need to be different solutions for each location but the community needs to see better, long term options. All the given proposals involve serious environmental disturbance including removal of large areas of bushland (over 2 hectares). Removal of the top soil in which the bushland is growing, makes revegetation more artificial and difficult to replicate whole ecosystems. Some of the proposed removals are of threatened ecological communities so these proposals are even more worrying. If the road were elevated by bridges, animals could move through underneath. The road design proposal needs to allow for animals to move safely from one area of bushland to another and preserve habitat.</p>
S259	N/a

S260	Wakehurst Parkway is too important a route for medical and other emergency reasons to not protect it to the maximum extent from flooding.
S261	The wakehurst parkway needs to be double lanes both ways with a bike lane added in -both ways. And an extra emergency vehicle lane should be included too. This is essential in your upgrade.
S262	While Transport NSW is undergoing flood mitigation work they should also improve the road access to either 2 lanes in both directions or at least provide 3 or 4 passing lanes. The traffic is quite heavy at most times of the day and 4 lanes would help to alleviate the frustrations of many drivers. The Wakehurst Parkway is a dangerous road that has not been upgraded since it was built.
S263	I think the road needs to be upgraded as it has a major effect on traffic when it's closed and will make traffic move smoother of updated
S264	This is a major problem for residents leaving only 2 ways out of the area. I support the maximum that can be done to solve this problem permanently. Traffic on the beaches is bad enough as it is
S265	Everything and anything should be done to keep the Wakehurst Pky open at all times, particularly given the location to the new hospital and the potential to save lives by reducing time it would take to get to the hospital from north of the peninsula. Lives are potentially at stake.
S266	Aren't all these options just stop gaps, when in all likelihood at some time in the next 10 years, the tunnel to the northern beaches will be built, in which case a 4 lane Wakehurst Parkway from Seaforth (one exit of the tunnel) to Narrabeen would (should) be built. Why waste money on stop gap options when we should be building a new higher and wider parkway NOW. Prefabricated concrete sections could be laid on top of the current road, using the same footprint, However, widening the road from 2 lanes to 4, and increasing the height by as much is needed (about 1m).
S267	has anyone thought of using caissons , leave most things as they are .of course clean any silt so the rain water can run freely . with caissons you have a natural way for any wildlife to move freely form one side to the other minimal interference . you can build one lane and move the traffic to the other side . prefab on concrete poured as needed . it is used around the world . see what you think
S268 / S437	Comments received: 30/6/21 (S268) Maximum remedial work desirable to optimise Northern Beaches hospital access to Northern Beaches Comments received: 29/5/21 (S437) Secure, timely emergency hospital access for the Northern Beaches north of Narrabeen is a significant consideration for trying to keep the Wakehurst Parkway open
S269	Strategic route should not close due to rain.
S270	None of the Options above are satisfactory. This is a very important route and the road should be 1 in 100 year flood proof. Forget the existing environment - make a new environment. The existing environment is forfeited with current population growth and the existence of the new Northern Beaches Hospital at Frenchs Forest. This road will be even more important when, or if, the tunnel under Seaforth is built.
S271	Any way to raise the road level?
S272 / S345	Comments received: 29/6/21 (S272) Want the Parkway to be open for access to Hospital at all times. Comments received: 8/6/21 (S345) Needs to be done urgently for access to hospital. No need for extended studies.
S273	There appears to be a fair amount of work done in researching the options and environmental impacts. Option 5 promises to give the best result in terms of reducing amount of time the Parkway is closed due to flooding. All options will have some environmental impacts but it's important that the option chosen achieves the best cost/benefit result and from what I can see, that is option 5.
S275	My preference is Option 6: Do it once, do it properly, 2 lanes each way raised above any possible flooding. It is very rear that you can do the posted speed limit on this road because of non drivers doing 60 to 70kph and most overtaking places have been taken away over the last 50 years.
S276	Considering the highly likely climate changes that we expect it seems imperative that Option 5 must be adopted.

S277	With option 5 being twice as effective as option 4 at a cost of an additional \$4.2m it would seem to be a common sense investment to run with option 5. The main problem of flooding is the inability for creek water to quickly enter Narrabeen Lake. This is because it is in serious need of dredging west of Narrabeen Bridge. Not only is Wakehurst Parkway effected by flooding the surrounds of the lake also suffer flooding due to decades of allowing the silt to flow into the lake making it ridiculously shallow. It is only a matter of time before it is known as Narrabeen Swamp. Dredging worked 60 years ago & reduced swamps in North Narrabeen & Warriewood so focus on that issue & the Wakehurst Parkway flooding will be greatly reduced.
S278	It has always been obvious that the waterway is substantially blocked up with vegetation, and needs to be restored to normal operation
S279	I believe the job should be done once and done properly. The inconvenience to the public will be great, but it just has to be done.
S280	Best balance between cost, effectiveness and env. Impact
S281	Spend more money and do a better job.
S282	I live in Avalon, which means I am 22Kms away from the Northern Beaches hospital, if I lived in Bondi I would also be 22Kms away but the road from Bondi to the hospital is not prone to flooding, whilst the road from Avalon to Frenches Forest is. So why can't we get the road fixed properly given it was the state government that stated we needed a new hospital to replace the one at Mona Vale.
S283	Have you considered a permanent solution to the lake opening so that would minimize flooding on the parkway. It is also possible to design a bridge for part of the parkway that floods and it have concrete tunnels underneath to protect wildlife and water flow. I am not convinced any of your options for the cost give long term solutions to the problem
S284	With building all the culverts and levee lift, why is there no discussion/option about lifting the level of the road along with the culverts and levee lift? Recognising this would result in significant disruption in the sort term, the occurrence could be shifted to 1 in 100 year rains... The road lift on pylons would be equivalent to increasing culvert sizing, remembering that the volume of water thru a culvert is increased by the square of the diameter of the pipe. Thanks,
S285	I agree that we complete the work in option 5 . Lets do the works once, so that the mitigation does not need to be repeated year after year. I understand that the finances are available to complete this option,
S286	The Parkway is an essential road especially for emergency access to Northern Beaches Hospital. It is vital that it be kept open.
S287	I have picked option 5 because any alternative is actually delaying the inevitable spend. The biggest challenge facing this or any solution is the impact of further climate change & in fact the inherent inaccuracies in predicting flood and afflux levels anyway and therefore number of times the road will be cut. As I understand it the creek water flow is trying to follow the original over land flow path i.e. the original creek prior to retraining when the Parkway was originally constructed decades ago. Regardless of the solution the spoil berm built up by years of inundation and flooding needs to be removed anyway. The removal of this material will impact the immediately proximate flora and fauna so the challenge is trying to limit this disturbance. There would be no easy less intrusive alternative. The construction of the proposed culvert structures - one to allow flow under the road to the original creek alignment and one to allow flow back under the road to the current creek alignment. These culvert structures are proposed to be large diameter pipe culverts numbering 5 or so rows. Their installation adjacent to the road creates very deep excavations which will require significant protection against erosion, traffic and providing a safe work situation. Regardless traffic will be impacted. I would propose that the construction of a low level bridge(s) piled through the existing carriageways (with one side built at one time then followed by the other side) is a solution that is safer, better placed to limit environmental impacts by a reduced footprint and potentially limits exposure to delays from rain events. Process would be to widen the road locally for one lane, pile through one carriageway, excavate

	<p>embankment, place concrete deck, switch traffic and repeat for other side. Use of precast (or bored) concrete piles, bridge headstocks, deck beams and barriers will assist in timely execution of the works.</p> <p>The other challenge is of course budget - i.e. is the \$17.5m sufficient.</p>
S288	We need to get on with it. For too long we have been suffering the uncertainty of access during weather events. It is too important given the increase population planned for the peninsular.
S289 / S426	<p>Comments received: 26/6/21 (S289)</p> <p>The Feasibility Study is very extensive & so I can now see that this option is my preferred one because it gives most relief to flooding. However, what would it cost to build up the road to address further flooding issues & provide a wildlife corridor?</p> <p>I cannot see that the study includes looking at building a bridge where Oxford Falls road west meets Wakehurst Parkway? I believe this is needed as part of the flooding problem.</p> <p>Comments received: 30/5/21 (S426)</p> <p>I DON'T CHOOSE ANY OF THESE OPTIONS (but the form requires it) . These options are too shortsighted to address the issues. I'm sure the cost is extremely high, but no costing is shown for an elevated road which maintains some of the integrity of the environment & above flood prone areas.</p>
S290 / S368	<p>Comments received: 25/6/21 (S290)</p> <p>Emergency vehicles need all weather access (eg. ambulance)</p> <p>Comments received: 7/6/21 (S368)</p> <p>Prerequisite for Ingleside land release . New hospital should never have been approved without ensuring all-weather ambulance access via the Wakehurst Parkway.</p>
S291 / S381	<p>Comments received: 25/6/21 (S291)</p> <p>ON SECOND THOUGHTS Why not elevate the existing road down the bottom and a an elevated causeway at Oxford falls if a bridge is way over budget</p> <p>Comments received 5/6/21 (S381)</p> <p>Needs to be done now and not a part fix that has to be upgraded in the future</p>
S292	<p>Civil engineers and anyone who has been impacted by the two lane Wakehurst Parkway closures and traffic jams over the last twenty one years appreciates that there is only one permanent solution to prevent flooding closures and traffic chaos.</p> <p>Build 2 x 2 lane viaducts either overhead or adjacent to the existing Wakehurst Parkway from on-ramps at the corner of Barrenjoey Road and The Parkway through to Frenches Forest Road. This proposal can demonstrate minimal long term environmental impact. Also, you can then still fill up Narrabeen Lakes with your silt and storm water from your existing drainage works to the north. (Are you ever going to dredge the silt out of the Lakes?).</p> <p>I previously submitted to you the estimated costs for five kilometres of two lane steel viaducts back in 2015.</p> <p>This current round of design work, public consultation and PR announcements is just fluff. Get serious!</p>
S293	If you do it, do it properly
S294	This is still a band aid solution, it's still one lane each way with one of the northern beaches main health service at the wrong end of the parkway. A proper solution is to place a Viaduct for the Parkway along the existing alignment with 2 lanes each way, there is enough road corridor to

	achieve this and it's a long term goal for flooding and traffic management. If the council and State Govt are wanting more population on the Northern beaches, they need step up and make these arrangements for the extra traffic now. One would have thought they would have done this when they did the road upgrades for the Hospital.
S295	Consideration should be given to raising the Parkway following this project.
S296	I think we can keep spending money on bandaid solutions or accept it is a major arterial road and treat it as such.
S297	It appears from the details of this option that only an extreme weather condition would trigger a road closure, supposedly every two years. While not completely eliminating the prospect of road closures this option would to all intents and purposes make safer and more reliable access along Wakehurst Parkway. As this is the most direct link from the Northern Beaches suburbs from about Collaroy to the Northern Beaches Hospital it behoves the council to create and maintain a reliable access route.
S298	I have read the options and believe that option 1 with perhaps an improvement in the drainage if possible, would be our preferred option. I have lived in the 2107 postcode since 1968 and worked in Willoughby & Frenchs Forest until last year for over 10 of those years. I am extremely grateful to have raised two children in this beautiful seaside area. When heavy rain occurred I allowed extra time in my journey to work to allow for travelling a different route (of which there are two) keeping in mind that this small inconvenience was a small price to pay for living and raising children and grandchildren in such a wonderfully under developed natural environment. Many are moving here for the natural beauty and relaxed lifestyle but are not willing to sacrifice the natural beauty because of small and relatively short inconveniences. It is a pity they do not just visit then return to their convenient lifestyles.
S299	Supportive of Option 5. Maintaining a continuous traffic flow while work is being carried out is important. Our [redacted] operates Monday - Friday 9-5pm for approximately [redacted] staff and [redacted] students on site at [redacted] In addition we have [redacted] services on Sundays from 8am, 10am and 6pm. [redacted] staff and students travel from Narrabeen and north to our [redacted] site so it will be important that works don't disrupt traffic flow. There are no backstreets to take detours around the road work sites. Can work be done at night?
S300	This is my preferred option as it will give the most protection against future flooding.
S301	I think this is the best long term option
S302	Option 5 seem to be the most cost effective for maximum reduction in flooding frequency. Eventually the Parkway will have to be widened to 4 lanes and option 5 will give the best base for these future works.
S303	drainage improvement is good but really need to raise the section of road that is flood prone by a metre
S304	Why would there not be an option to eliminate the need to close this road ? All of these options are sub par and should not be acceptable for our community.
S305	I also recommend a storage pit at the lowest level off the road, to provide a place for the water to drain.
S306	The parkway needs to be improved for cyclists. This is the perfect route for cyclists from the northern beaches to NB Hospital, forest way, Seaforth, Mosman and the city. This route is ideal because it is shaded, less polluted, nice grades and flats and minimal side streets. This upgrade will attract cycle groups away from the congested traffic on Pittwater Rd and link the North Shore to popular destinations via McCarrs Creek Rd. The reason it is not currently popular is that the shoulder is too narrow and is not maintained so cyclists are constantly avoiding glass, sticks, sand rocks and car parts, it is dangerous. The other obstacle is the narrow bridge at Deep Creek which is terrifying. To encourage passive transport and cycle visits, we need a 3m shoulder in each direction and a second bridge built at deep creek. One for vehicles heading south and one for vehicles heading north.

	<p>If the country is serious about zero carbon emissions, then passive transport needs to become the norm. After the initial capital outlay, a cycle lane is cheap to maintain.</p>
S307	<p>Option 5 seems best. The Parkway seems to close every time it rains these days. One of our major roads and leads to our hospital! The community needs this completed asap. The congestion on the other roads when the Parkway is closed is frustrating! This has been talked about for so long. Just do it. Many thanks from a life long resident.</p>
S308 / S434	<p>Comments received: 21/6/21 (S308) Please make the parkway 4 lanes, two each way, raised, as proposed in the original plans at INBH planning stage Comments received: 29/5/21 (S434) Also widen the entire road to four lanes dual carriageway.</p>
S309	<p>The parkway needs to be widened to 2 lanes each way. Its a ridiculous option to do anyone of the above options , spend all that money and not widen the parkway. Too much traffic it's dangerous as is too fast and needs roundabouts to make it safe for traffic trying to enter onto the parkway. Flooding on the parkway is the least of the problem, you have people dying from accidents with speed and as more traffic is forced to use the road to the hospital more accidents and loss of life will happen more often. The council have an obligation to keep its citizens safe on our roads and by not widening the road you have made the parkway one of the most unsafe roads in Sydney.</p>
S310	<p>As per your introduction, Wakehurst Parkway is one of the main road connections on the Northern Beaches passing through Narrabeen, Oxford Falls, Frenchs Forest, and North Balgowlah. It is imperative that the works are done to minimise road closures in the future due to flooding. Doing options 1-4 now will just result in further and more expensive works needing to be done in the future.</p>
S311	<p>Living on the side most affected by the Parkway closure, this option seems the most logical. We do need a permanent solution though, like raising the road (maybe looking at a "floating option"). It's ridiculous with the population growth going on in the northern end of the peninsula (Warriewood and proposed Ingleside 1000 dwellings, just to name a few), that we can't come up with a permanent solution, especially taking in count that the only hospital we now have is on the other side for so many of us</p>
S312	<p>Yes it is the most expensive solution but we will benefit from this long solution.</p>
S313	<p>Hi, Have seen some councillors comments and can't believe they want to put environmental issues before Human life. Let's bite the bullet and do it correctly the first time with the major concern being providing every chance to save lives. If one person dies due to flooding and Wakehurst parkway being closed it will be up to council to explain to that family why. Do it correctly the first time.</p>
S314	<p>The upgrade of the Parkway has been talked about for 40 years at least so if something is ACTUALLY going to be done long last then it should be the B4 option. Its the most expensive but since nothing been spent in years and now its the key route to the new hospital it must be a long-term upgrade.</p>
S315	<p>Given that to many Wakehurst Parkway represents the most direct access to the only emergency department on the peninsula at northern beaches hospital given there is now no longer 1 at Mona Vale the least number of closures is imperative to those dependent on access to that facility. We have the population North of Narrabeen bridge equivalent to nearly all the major regional centres of New South Wales I think well in excess of 250,000 people property closer to 300,000 people. Therefore access to the emergency department at northern beaches hospital could be a matter of life or death to many and having the road closed during an emergency is not something we should be contemplating and therefore I recommend the total solution proposed an option 5</p>

S316	Best option would be an elevated dual carriageway from Oxford Falls to around Deep Creek with dual carriageway was back to the lights ta Narrabeen.
S317	Also need to dredge where Deep Creek enters Narrabeen Lagoon. The very shallow depth will limit the amount of water that will flow from the creek after these other improvements.
S318	It is important we have access to the Hospital and ONLY three roads linking the Northern Beaches to the Suburbs. The road should not flood which is a decision for the experts to design. It would be a shame to spend 17m and then a decision is made to up to up grade the road in the near future. The use of series of siltration PONDS could slow the flow and minimise silt that also impacts the ecology BUT if the council does have a regular maintenance plan in place the designed outcomes will FAIL.
S319	1. It was always obvious that it would be necessary to upgrade Wakehurst Parkway when planning to build the Northern Beaches Hospital at FRENCHS FOREST. I am surprised & disgusted that it wasn't part of that project. It is common sense. 2. Wakehurst Parkway is a very busy & dangerous road. It is a main road & I think should be a divided road, however all that is on offer now, is some flood mitigation so yes, let us do the best we can to stop the road being closed due of flooding. 3. The people who live in the northern part of the Peninsular need to be able to rely on this direct route to the hospital in an emergency.
S320	This road is major access point into and out of the centre of the Northern Beaches. The road should be up graded to dual a carriageway for now and future growth. It is of the up most importance to give quick access to the new hospital to save lives 24/7 what is the cost of a life and how many will be lost until this upgrade is completed.
S321	All structures built in the Narrabeen catchment area are required to be above a once in a 100 year flood. Council can not proceed against its own requirements. Council has a duty of care to supply an all weather road to the local hospital. Please supply plans to make the Wakehurst Parkway an all weather road.
S322	Lives will be lost everytime the road has to close due to flooding. The option that will mitigate this the greatest is the only option I see
S323	This is a major road and provides critical access for many NB residents to the hospital. Everything possible must be done to ensure it can perform its function. Even one closure per 2 years is unacceptable but if the funding is there to make major improvements such as option 5 that must be undertaken as soon as possible
S324	I believe this option also include a turbidity pool in order to collect further sediment as well as other potential contaminants coming from the areas upstream. WSC already preformed a study prior to 2004 and came up with a similar plan except it did not include levees to my knowledge. [REDACTED] who was a WSC Cr at the time and went on to become the Mayor of Pittwater council later told me of this study and subsequent recommendation. I believe the addition of a turbidity pool will future proof the proposed works somewhat and will help council maintain the creek levels going forward. <i>(included with this submission was a 115p report by SMEC)</i>
S325	Option 5 looks to be the best way to deal with it, or a suspended road would solve the issue but I understand the cost would be unrealistic.
S326	Need a long term final solution.
S327	In the difference between 4 and 5. 5 is much more effective for less that twice the cost. The lower cost options will more than likely need renewing and therefore end up costing as much if not more than 5.
S328	Option 1 is not a reasonable approach. The difference in costs between Options 5 and other options is not significant and would be more than compensated for by reducing the impact on the community. Option 5 should be pursued. Carpe Diem!
S329	Pending further environmental investigations it would be great if we could reduce the flooding of the Parkway to only once every two years.

S330	This is one of the main connecting roads for the northern beaches for all traffic and affects congestion for many miles around when it is closed. I believe the matter needs to be resolved urgently.
S331	<p>As so often happens, the options offered seem overwhelmingly limited by cost and short term thinking and not commensurate with the importance of this very vital traffic link.</p> <p>Particularly in respect of the section of road length prone to worst flooding, the bends, where a superior solution would be a low level elevated structure in the form of a continuous bridge above the present road alignment for most of the length of greatest concern. At probably no more than 1.5 metres above the existing road surface at any location it would obviously cost more but would avoid the use of damaging bunds and levies, permit a natural restoration of the surrounding flood plain and therefore less future flood plain maintenance and enable the completely safe passage of wildlife crossing the road corridor (something that does not seem suitably addressed by the options described).</p> <p>For speed and minimum environmental impact, foundations(based on data provided) would most likely be piled (bored to bedrock or driven) with cap beams just below the existing surface. Then above that either piers or short columns supporting concrete transoms and deck with a maximum use of precast components. With appropriate configuration and staging this could be achieved while maintaining continuous two-way traffic with a temporary side widening that encroaches very little beyond the existing road surface and verge.</p> <p>The Haskoning report, Wakehurst Parkway Flood Mitigation Feasibility Study, part 15 "Previous Flood Mitigation Studies" makes brief mention of 2017 options investigated by Cardno that include "raising of Wakehurst Parkway". Unfortunately, no mention is made of the method of raising contemplated except a reference to "environmental impacts" and the complete unavailability of subsurface exploration beyond a depth of two metres which together suggest an embankment with culverts and not a continuous elevated structure. Apparently, and mostly due to "having a significant capital cost" the raising option received no further investigation. I suggest that decision may have lacked appropriate foresight.</p>
S332	<p>This option5 has almost as much impact as option 4, but with twice the benefit, for only a small increase in cost. It seems like a no brainer, given that the other options will not give much relief from flooding, and will take almost as long to complete. In the near future, option 5 will be well worth the effort, especially given that NBC has recently begun implementing our "Flood Plan " plans and impacts on local housing etc.</p> <p>We in the NBC area need to finally move into the 21st century re our roads!!</p>
S333	Such a pivotal travel route. Every closure causes carnage on all other roads, the economic cost of every closure is significant, loss of wages & cost to employers and most importantly the impact on emergency services ability to service our area.
S334	<p>I travel up to 4 trips a day on wakehurst parkway. Closures cause significant delay and disruption. Notification is not live causing more delay and disruption. The alternative routes are gridlocked by 730am.</p> <p>Now ambulances require this route it is imperative it be done to the maximum possible standard as it may be the difference between life and death for a patient, especially in gridlocked alternative routes in peak hour</p>
S335	Very simple. Why muck around with half measures. Get it done once and for all. Traffic is not going to lessen from the peninsula in coming years.
S336	Its a real failure to have provided a road that floods quite often. Now that the hospital is located at Frenches Forest it time to upgrade the road so it no longer floods. I am not sure where the flood waters close the road exactly and how deep it gets. My option would be to raise the road in the areas that flood but option 5 seems reasonable.
S337	This issue needs to be properly resolved, not only for the financial and traffic impact on the Northern Beaches of road closures, but also to improve emergency services access. Wakehurst parkway is one of the main access points for the Northern Beaches Hospital, and as someone who has had a family member in an emergency and witnessing the time it took for an ambulance to get down Pittwater Rd in peak traffic, I can only imagine what it would be like if Wakehurst Parkway was also closed at the time.

S338	Make this significant thoroughfare fit for purpose. If the Government has spent all this money & effort in constructing the NBH & Freeway upgrades then the people of the Beaches need to have full access - I believe that a comprehensive plan such as is proposed (B4 O2 S1) will give us the best outcome.
S339	While a significant cost, it is the most proactive from a long-term perspective.
S340	The number and identification of invasive and noxious weed species should be provided so that people with little knowledge about flora can see the pros vs the cons of the options. I know of 3 just off the top of my head - Lantana, Morning Glory and Privet but realise there are many more and removal of these whilst doing works would be a good thing!
S341	It needs to be done. We need reliable access to the hospital
S342	With the Northern Beaches Hospital being the nearest hospital for people on the peninsular it is essential that it accessible at all times. Currently the road is closed every time there is heavy rain which increases traffic and travel times on alternate routes to the hospital. My daughter nearly died at birth but we were very fortunate that we could get to Mona Vale hospital without delay. The Parkway is a critical route to hospital for a large number of people and having it closed due to flooding is not acceptable
S343	We should do as much as possible to keep this road open.
S344	Just do it, especially with the closing of Mona Vale hospital
S346	Spend the money and do it already.
S347	Ensure what ever new flood mitigation works are done are suitable for the future increase to two lanes in both directions.
S348	This option will ensure that closures are kept to a minimum, allowing emergency vehicle and residents access.
S349	Better to do it once rather than piece meal.
S350	I'd like to make sure this won't damage the local ecology, flora & fauna or any areas of Indigenous significance, but otherwise give it my full support. This is a vital transit link and any closure has negative impact on all others in the road network, but especially local families who travel on it daily.
S351	If we are to fix this problem lets do it properly the 1st time
S352	The rd should be upgraded to 4 lanes before the Beaches Tunnel construction begins
S353 / S391	Comments received: 8/6/21 (S353) I think our roads need to be updated ASAP Comments received 3/6/21 (S391) Upgrade alternate routes along Oxford falls road west with a culvert when the wakehurst parkway is closed to keep the parkway flowing when the main section of parkway is closed
S354	Not sure if it was laziness or incompetence or a mixture of both, but the Council has a chance with the building of the Warringah Road underpass to obtain plenty of "local" stone to use in the upgrading (Flood proofing) the Parkway. Since that has now passed the best would be a modification of option 5. This the consideration of an elevated roadway. Because of the distances involved, it could rule out a long bridgeway. This means it could also be done by using pre-made large culverts (a decent height so the wildlife can easy use them to cross from each side and cut down on the road kills.) I am sure the engineers can come up with a way to strengthen these and support the roadway on them. Also make it wide enough for the transport and allow for a cycle way as well. Sometime there will have to be a plan for a wider roadway as the traffic will increase if a tunnel at Seaforth is built. Not sure why the state government should not be contributing more since this is the main road to the Northern Beaches Hospital.
S355	I prefer option 5.

S356	<p>I support the most expensive options.</p> <p>But flooding is not the only problem with the Parkway. The road is very poorly maintained and there are a number of problematic right turns that could be made much safer for a relatively small expenditure. These are:</p> <ul style="list-style-type: none"> • the turn into Deep Creek Reserve for Southbound traffic • the turn into Oxford Falls Road for Southbound traffic • the turn into Middle Creek Reserve for Northbound traffic • the turn into Bilarong Reserve for Northbound traffic <p>All of the above need local road widening to allow for a right turning lane.</p> <p>But the biggest problem with the Parkway is the Northern entrance onto it for Southbound traffic off Pittwater Road. On Mothers' Day this year, it took me 25mins to drive from the traffic lights at the Powder Works Road/Garden Road intersection to the start of the Parkway. I suspect the morning peak commute is little better. The Parkway/Pittwater Road junction desperately needs an overpass or underpass for Southbound traffic accessing the Parkway.</p> <p>I'm amazed that the Wakehurst Parkway attracts so little capital expenditure – it really is a local disgrace.</p>
S357	Your above suggestions miss the most important fact - that is that the Northern Beaches Council is refusing to regular dredge the Narrabeen lagoon and the sea outlet. Not only would this greatly help flooding it would allow recreation sports to continue, At the moment the lake is so silted up you can almost walk across it at many locations.
S358	Recommend Option 5 be commenced as soon as possible
S359	This road is an important throughway for the Northern beaches and in particular en-route to the new hospital. All efforts should be made to restrict its closure.
S360	I think their needs to be a focus on fixing the flooding issue for the long term
S361	The road is a vital link for the Northern Beaches not only for the hospital but to take the pressure off Pittwater Rd as well.
S362	I think option 5 is best as it seems that public construction is often minimized. This causes multiple fixes in the future at increased cost.
S363	If we're going to spend money and do a job, lets do it properly and for the long term. Yes, it's more money but it will be money well spent - unlike so many other initiatives that are a waste of time and money.
S364	<p>As our Council, NBC has an obligation and is duty bound to undertake Option 5 or have Mona Vale hospital upgraded to a proper hospital. As council cannot upgrade MV Hospital, it has no "option" but to undertake the funded works and fix the Wakehurst Parkway so that access to the city and the hospital is possible in wet weather, were MV Road could be adversely affected by traffic, trees and flooding as well.</p> <p>If a council official were to time the trip from Palm Beach to the NB hospital with the Wakehurst Parkway closed, they would be astonished. 90 minutes to the nearest hospital for residents of the NBC is not acceptable. Let's start the build now, not in 6 months.</p>
S365	Reducing the potential for flooding on the road that currently forms one of only 7 lanes to and from the northern beaches is paramount. When Wakehurst is closed the other access roads become gridlocked. This is especially important to consider as our new hospital is at the top of the hill. With climate change and more severe weather most likely, an increase in flooding frequency is likely as well. If the project is to proceed then best to make it as floodproof as possible. I also think Wakehurst should be made wider or at minimum passing lanes need to be added.
S366	I think this is the minimum action. Really the road requires raising and dual carriageway.
S367	The issue needs to be addressed and I think you need to go for it and sort the problem out in one hit
S369	While doing this work, is it also planned to widen the road to two lanes each way?
S370	.

S371	<p>I don't agree with any of council options they are really not addressing the problems adequately and are at risk of damaging far too much native vegetation and silting up creeks.</p> <p>The use of bridges and building up the road with adequate guttering would be a far better long term solution.</p> <p>Money should not come into it as this needs to be fixed permanently and not in an ad hoc manner as this is an important road for residents living in the north ward giving us the fastest route to Northern Beaches Hospital in emergencies and gives us an alternative to Mona Vale Road when accidents and bush fires occur.</p> <p>As my feedback will not upload unless I indicate an option I have ticked 5 but do not agree.</p>
S372	Stop talking and get on with it!
S373	Why wouldn't council consider extending the shoulder of the road to allow for bike lanes in Wakehurst parkway too ? Bike riders use this road often .
S374	<p>improvements need to be done and it would appear the preferred outlined is effective.</p> <p>do you have any visual images of the final look /outcome?</p> <p>will there be greater access provided to this natural resource on completion?</p> <p>currently cars park on verge which is hazard and it would be excellent if access could be incorporated along creek to connect with current narrabeen lagoon walk.</p>
S375	<p>The flooding issue with Wakehurst Parkway needs to be fixed once and for all, for a number of reasons, however, one major reason exists above all others</p> <p>Our local hospital was removed from Mona Vale and our new hospital is NBH at Frenchs Forest</p> <p>As an example . . .</p> <p>I live on Wakehurst Parkway at the Narrabeen end, in one of the very last houses before Deep Creek, and if I were needing to go to hospital urgently now, either under my own transport or via emergency services, then the following is true >></p> <ul style="list-style-type: none"> - Mona Vale Hospital was only a 5 minute drive on average and never had access problems when raining, or if there was a car accident etc, there are many ways to get from my place as an example, that would only add a minute or 2 to the ETA - NBH is now an 11 minute trip at best for me at the posted speed limits during late evening times - During main traffic / peak times, this could be 15 minutes or more to get to NBH - During a medium to heavy rain event where the Parkway is closed, or a car accident occurs, I would have to back-track up over Elanora Heights, up Mona Vale road, then down Forest Way to access NBH, which makes the new travel time @ 21 minutes late evening or @ 25 - 30 minutes + at busy times - The same or possibly more time would be taken to go via Pittwater and Warringah Road route - Where we are constantly told that every minute counts in a medical emergency, my personal trip is now at 'best', double the time to NBH than Mona Vale, or during flooding, up to and/or exceeding 5 times as long as it would be to Mona Vale <p>The above would be true for many other NB residents also, so by allowing the flooding problem along the Parkway to continue, the governments and councils involved are knowingly putting the lives of locals in danger, and I would think that it's only a matter of time before there is a death attributed to such a scenario as mentioned above</p> <p>Aside from the health and safety risks mentioned above, the upgrade to the Parkway should also include an overtaking lane, as a twice daily commuter along this road, I can assure you that it only takes one slow driver for example, to cause a major backlog in the morning / afternoon peak hour times</p> <p>Wakehurst Parkway needs to be fixed properly . . . and immediately</p>
S376	While the impact to threatened species is undesirable, it is best to do this once and do it properly. Afterwards, work should be done to enhance the natural environment around the sites with the aim of leaving it in a better state than it is now.
S378	<p>██████████ staff and students travelling to school along the Parkway are severely impacted each time a closure occurs. The proposal outlined in Option 5 that would reduce flood events resulting in closure of the Parkway to a 1 in 2 year timeframe would be appreciated by the school community using this important route to ██████████.</p>

S380	It is important to keep the Parkway open at all times whether flood, fire or other emergency. Most environmental damage can over time be mitigated with replanting and other land, water and fauna management measures. Do it now or pay a greater economic and environment price later.
S382	With increased population planned on NB and construction of Tunnel more cars will be using our roadways including Wakehurst Parkway. Therefore, closures during flood events would not be a popular outcome. Option 5 appears to provide the best movement of traffic as well as cater for wildlife with underpasses and sensitive removal of sediment. Further research is required to provide habits for the endangered flora and fauna. It is a unique and beautiful area - not only providing a cleaner environment by offsetting the car emissions but also providing homes for a diverse range of flora and fauna that must be preserved.
S383	I'm use that road a few time a day to take my kids to [REDACTED] the traffic are very bad and dangerous
S384	Wakehurst Parkway needs to be upgraded to 2021 standards.
S385	We need to maximise road access with minimum environmental damage.
S386	the Community need a long-term solution here to this ongoing problem. I am in favour of Option 5 but would prefer to see an option explored where there would be no flooding at all such as via a raised motorway over the flood-prone sections.
S387	We need to get this done now and spend the money to do this remediation work properly. However we need to take care of native flora and fauna in the area and make every effort to protect local indigenous heritage sites too.
S388	Option 5 !! Also while there are disruptions to fix the flooding issue why don't you expand the road & make it 2 lanes !!
S389	Critical infrastructure such as this should have the appropriate material investment.
S390	Do option 5 asap
S392	We need to do as much as possible to mitigate flooding however the road needs to be widened to 4 lanes, as was promised in the initial planning of the Northern Beaches Hospital and which the powers that be have gone back on their word on. We need to look to the future and that future entails a significant increase in population on the northern beaches and as a result more cars on the road. Transport needs to be fluid or we will end up with massive traffic delays.
S393	Much more effective
S394	There is not indication of animal safety. This must be taken into consideration.
S395	If we are going to do something lets do it properly. If we take the easy approach now it will only come back to bite us in the future. :Let's future proof the Wakehurst parkway as a priority to ensure whenever someone needs to get to the hospital they can! Imagine the day when its flooded and someone passes away because they can't use the Wakehurst parkway.....surely that's more important than saving a few hundred trees.
S396	We need to have a permanent solution as well as options for widening it in the future.
S397	This s the best option even if it's the most expensive
S398	Fix it properly the first time, and the marginal cost over next best option is worth it.
S399	I chose option 5 because it's the best option. However, I don't want to choose any of these options because they don't resolve the problem. Given the decision to put the near Northern Beaches Hospital where it is, it is critical that Wakehurst Parkway is NEVER closed due to flooding. A real solution may be expensive but it is the only option.
S400	Road needs to be widened and where possible raised
S401	Because our idiotic government decided to move Mona Vale hospital to Frenchs Forest, we have NO OTHER OPTION than option 5 because they have made the Wakehurst Prkway a vital lifeline for Northern Beaches residents. I am very unhappy about the impact to endangered flora and fauna and this should have been considered before an ill-considered cost cutting public/private partnership for a health care solution. The government has us snookered.

S402	Option 5 is the best. However it will require maintenance over a few decades to ensure that sediment build up does not increase drastically again which will require ongoing funding and support from the state/ federal government
S403	With the transfer of many of Mona Vale hospital's functions to Northern Beaches Hospital it's even more important that Wakehurst Parkway remains open.
S404	Dont screw around. Get it done and do it right so you dont need to spend more money in the future. Road should have been raised on stilts when built to allow water & wildlife to move underneath.
S405	This issue will only compound over time with increased users on the road and lead to potentially worse environmental impacts down the line if not done.
S406	I believe if you are going to take the time to decrease flooding you should do the best option possible. It is not increasing traffic flow along the road, simply improving safety and upgrading to what would be standard if the road was built now.
S407	The roads need more planning like this to open up our community. Access to the hospital for residents of the north and a bus system needs to be planned through this area to take the congestion away from Pittwater Rd. The significant upgrade is needed to cope with the expansion of the population in the area.
S408	The reality is the road has needed upgrading for decades. It is a major access way, even more so now there is THE major hospital for the beaches area along it. The closures due to flooding are crazy. Things have to change and I support any upgrading, but if you are going to do it - do it properly!!!
S409	Since the Wakehurst Parkway is such an important route to the Northern Beaches Hospital and has been ignored by successive State Governments and road authorities for decades it is time the State Government committed to fully floodproofing this road. With interest rates at their lowest and State Government has reportedly an exceptionally strong economy, now is the time to commit and not waste ratepayers time by asking them to comment on an options comparison table that can hardly be read and does not fit the long-standing needs to prevent the road being flooded!! Why are no bridges or raising the road included in the options? Estimated Population increase by over 31,000 people by 2041 this road must meet the future needs of the community. As it was named after Lord Wakehurst, the Governor of NSW, it should be the best road possible. Revenue NSW has posted that the NSW government has \$460 million Don't let them off the hook so ask Transport for NSW to provide those additional funds to fully floodproof The Parkway please.
S410	Given that the Wakehurst Parkway is a major link for emergency vehicles to the Pittwater region, any effort less than maximum would potentially cost lives.
S411	Option 5 is clearly the preferred Option however: 1. it is unclear what is intended to in relation to the Causeway on Oxford Falls Road west. The two additional culverts on on the Parkway (south of Oxford Falls Road west) will simply increase the amount of water at that location. Please indicate what is intended at the causeway; 2. any planning for the works must anticipate that the Parkway will be widened to a dual carriageway to service the Northern Beaches tunnel; and 3. the sewer line (on the eastern side of the Parkway) should be extended to service properties on the west of Oxford Falls Road in conjunction with the roadworks. yours sincerely
S412	The regular flooding and closure of the Wakehurst Parkway goes back much further than my 20 years in Collaroy. It is one of only 2 north-south arterial roads(besides Pittwater Rd). Its closure also forces ambulances from north of Collaroy to go the longer way round to the Northern Beaches Hospital via Pittwater and Warringah Rds. As an aged resident I am aware that this could affect a matter of life and death. Let's not do an immediately cheaper option now which will require future remediation. Let's fix the problem now to the fullest extent physically possible!

S413 / S500	<p>Comments received: 1/6/21 (S413) The best option is the last one option 5 as if it keeps closing like it's doing these days for sometimes four to five days straight, is very inconvenient to locals like myself whom only live one street away from the wakehurst parkway. But on many occasions have to go the long way around in more traffic than usual as the parkway being closed, very dangerous in a life threatening situation especially for the ambulance services around the Northern end of the wakehurst parkway & with the completion of the new ambulance station at Mona Vale. It's just stupid not to get the flooding situation fixed up soon as possible. The environment will eventually recover again as long as it's done proper & smart in the first place.</p> <p>Comments received: 5/7/21 (S500) Hi there, Just letting you know my opinion for the Wakehurst Parkway Flood plan, that option 5 is by far the best plan in finally fixing up the flood issue. After living on the northern end of the parkway for over twenty six years and seeing it always closed due to a day's worth of heavy rain is unacceptable especially since there is a major hospital now at French's Forest. Plus having Mona Vale hospital closed & only opened as an basic medical centre it's a matter of life & death if the Wakehurst Parkway roadway is closed from to much rain, when there is plenty of solutions to finally fix the problem up once & for all. Sometimes it can be closed for up to four to five days like recently back in March this year. When that happens both Pitterwater Rd & Mona Vale Rd becomes clogged with too much traffic which easily adds another fifteen to twenty minutes to any journey out of the northern beaches. Thank you</p>
S414 / S502	<p>Comments recived 1/6/21 (S414) The above Options are not quite right. All that needs to be done is to restore Middle Creek to the state it was back in the 1950's. Back then, to my knowledge, the Parkway did not flood. I recall that, on at least one occasion, Narrabeen High School flooded - but the Parkway did not! Since then, silt and vegetation have built up and up, until today, the creek is largely blocked. All that is needed is to clear the buildup which has occurred since then. This is not "damaging" the flora, just restoring it to its previous state. Re the fauna - stop clearing their habitat over the rest of the peninsular! Too many trees have been chopped down already.</p> <p>Comments received: 18/7/21 (S502) Since the 1950s when Wakehurst Parkway did not flood, Middle Creek has become clogged with silt and vegetation. Simply restore it to the state it was then.</p>
S415	<p>If adopted, the parkway should be fixed properly the first time and no half measures. Environmental impact should be considered but not at the expense of fixing this road. This road is a vital access alternative to the Nthn Beaches hospital when there is congestion/accident etc on Mona Vale Road and Forest Way. The parkway needs to be open at least 95% of the time.</p>
S416	<p>To prevent the flooding of the Parkway also should include widening of the Parkway at the same time. To dig up the Parkway at several occations only increases the cost of doing the necessary works.</p>
S417	<p>Having lived north of the Parkway since 1998 I have noted more and more traffic over the years. More recently there is a greater increase in heavy duty traffic such as gravel trucks and busses and very much of the road north of Warringah Rd needs full resurfacing and not the patch work currently in place. Flood lock-outs create absolute havoc for peak commuters heading south and this requires a proper fix, not just a "band-aid" approach.</p>
S418	<p>Apart from solving the flooding problem it will make the parkway safer in heavy rain.</p>
S419	<p>Sounds like a sensible approach although slightly concerned about environmental impacts but I'm hoping that comes out of next phase.</p>
S420	<p>noting that there are areas to be considered in the next step, I believe that a significant change is required to ensure the passage along Wakehurst Parkway</p>
S421	<p>I believe the taxpayers money should be used for this. Its they (the tax payers) who suffer from lost productivity when the flooding occurs.</p>
S422	<p>Further to adopting option 5 the Wakehurst Parkway needs to be increased from a 2 lane to a 4 lane road as quickly as possible.</p>

S423	This is a major access road and provides access to the hospital. Why is there not a solution that has a one in 50 yr possible road closure. Where is the option for an elevated bridge from oxford falls to narrabeen.
S424 / S498	Comments received via email (S498) Dear Sirs As a resident at 25 Norma Road Whale Beach the Wakehurst Parkway is THE access road I think flooding stopping traffic every 3-6 months is not acceptable Realising the temporary impact on some species of flora and fauna is important I still would like to say that Option 5 is the best alternative as estimation of weather patterns in the 10 year future maybe over optimistic, in other words they may be worse than anticipated Sincerely
S425	In view of the growing importance of the Wakehurst Parkway and apparently meagre cost to benefit ratio I am surprised this was not undertaken long ago.
S427	We need to ensure the best outcome for keeping the road open. This is a major artery to the Northern Beaches Hospital, the city, Chatswood etc Without Mona Vale Hospital at previous service level, it is important to ensure the road stays open during heavy rainfalls as much as possible, while preserving the local habitat. At present it doesn't take very much rain at all for the Wakehurst Parkway to flood and be closed. This road upgrade was promised by the NSW Government prior to the completion of the Northern Beaches Hospital years ago, but not delivered. With heavy rain North Narrabeen roads flood, essentially cutting off access from the northern part of the Northern Beaches. Mona Vale road is an option, but then experiences heavy traffic if one or both roads above are cut due to flooding.
S428	While option 5 seems the best of the options presented, I can't understand why a 4 lane road (2 each direction) is not being considered to "future proof" the infrastructure - yes some vegetation will be impacted, but we can't have our key transport routes impacted by some vegetation exposure. In addition, while the bottleneck at Beaches hospital has been fixed, there needs to be improvements to the bottleneck where Wakehurst meets Pittwater Road - possible overpass as this traffic builds extensively in both directions during peak & weekend times.
S429	Take the time to do it right so it does not need to be visited, and provide opportunity to reestablish local habitats.
S430	If it isn't done fully now, the cost of doing less now and more later will be greater. So do the best job now and minimise environmental damage and identify issues that are probably there and will come to light eventually.
S431	The more long term permanent solution the better
S432	my view is that the road should be raised with the appropriate drainage with the least destruction to the native animals & foliage
S433	Spend the \$17M now. Other options are bandaids.
S435	ITS GOOD THAT AN ATTEMPT TO MITIGATE THE FLOODING OF THE PARKWAY IS BEING PROPOSED HOWEVER, IT'S BAND AID TREATMENT FOR WHAT REALLY NEEDS TO BE DONE. WITH THE GROWTH OF THE NORTHERN BEACHES POPULATION AND THE GOVERNMENT PUSH TO EXPAND THE POPULATION NUMBERS FURTHER, THE INCREASE WILL ONLY MULTIPLY THE AMOUNT OF TRAFFIC USING THE PARKWAY. TO BE PROACTIVE AND CATER TO FUTURE TRANSPORT NEEDS, BEFORE THAT NEED EVENTUATES, REQUIRES THAT THE PARKWAY BE EXPANDED TO AT LEAST FOUR TRAFFIC LANES. OVER EONS, ENVIRONMENTAL CONSIDERATIONS FOR THE PARKWAY HAVE BEEN LARGELY IGNORED AND YET THE AREA STILL FLOURISHES - IT DIDN'T STOP THE ROUTE BEING BUILT FOR THE WAR IN THE FIRST PLACE AND EXCESSIVE ENVIRONMENTAL CONCERNS SHOULDN'T BE A FACTOR TO DO SO NOW - THE AREA WILL ADAPT OVER TIME. SOMETIMES WE JUST NEED TO BITE THE BULLET TO PROGRESS AND CATER FOR THE POPULATION GROWTH.
S436	I don't want a band aid solution, I want a permanent solution that will save lives of humans (enabling cars and ambulances to use Wakehurst Parkway during torrential rain) not possums, reeds or frogs.
S438	Strongly support improvement to the Wakehurst Parkway. Reduced flooding is important and also duplicating the Wakehurst to allow better traffic flow.

S439	Every time the road closes the cost is enormous, financially, time wise and could prove fatal if ambulance delayed. Rain events are increasing therefore the road should be lifted above flood level.
S440	Need to ensure road stays open to access NBH
S441	Option 5 would seem the minimum extent of work to provide any meaningful change to the existing road flooding
S442	Do it once - get it right
S443	Are these flood and road closure predictions based on historic data or do they incorporate the predictions of increased severe storm activity due to climate change? (As a general comment - tax payers and rate payers like solid, well engineered and more permanent solutions as opposed to "band-aid solutions" that require multiple follow on fixes with a higher overall price tag). Be bold and courageous!
S444	If Council is going to the trouble of rectifying the flooding issue on Wakehurst Parkway, it would make sense to maximise the effectiveness of the works while all the machinery and workers are on site, rather than having to return at a later date costing rate payers extra money.
S445	Please complete this project as quickly as possible.
S446	We would support the additional work needed to make the Wakehurst Parkway fully flood-proof.
S447	The improvement of Wakehurst Parkway so it can stay open during heavy rain is long overdue. Too many residents are inconvenienced by the road closure during heavy rain. It should be fixed. Thanks
S448	Appreciate the diligence Council is showing but feel every effort should be made to ensure this main thoroughfare to the hospital is uninterrupted. Thank you for your efforts in securing funding.
S449	Dredge and drain it now. Stop fluffing around.
S450	Given environmental impacts are similar for less effective options, this recommendation is optimal. Provided environment restored post construction . If significant environmental objections are raised by the public, then Option 1 is only viable option.
S451	I feel this is long overdue
S452	what about installing a huge underground pipe in the section that floods
S453	The effectiveness of Option 5 speaks for itself. Eight times more effective as option 2 for four times the cost and twice as effective as option 4 for around a 30% increase in cost. This new council area deserves the best solution for what has been a very long term problem.
S454	Whatever it takes to fix is the best option for access to NBH and workers commute.
S455	It is important to keep this road open
S456	Best option
S457	In the great scheme of things, the environmental impact is vanishingly small. Just get on with it. It is amazing that such an obvious and essential upgrade to a main road, and a main road now servicing a major emergency hospital has been held up for so long. And bizarre that one of the options should be to do nothing!
S458	Option 5 is less than 4 times the cost of Option 2 but it is 8 times more effective.
S459	Maximum resolution requested
S460	Why waste time and money that don't work. Where is option 6 - Never flood?
S461	Access to the new hospital from the beaches needs to be secured. In times of emergency this road has become even more important.
S462	this work is essential and urgent. In addition to facilitating access to NB Hospital from north of Frenchs Forest, there will be more traffic along the Parkway once the Northern Beaches Link is built , which in turn will challenge the current one lane in each direction capacity too.
S463	Wakehurst Parkway is a key road , which now has the added importance of being a direct route to Northern Beaches hospital. It is essential that this road is kept open and therefore Option 5 is the sensible choice, especially as funds are available. The project must be carried out with all speed as it has already been ignored for too long. In addition it is no good having a road that is continually needing repairs and the potholes at present

	<p>are a disgrace. What plans are there for widening the road, if there are any then these must be taken into account along with the flooding and potholes.</p>
S464	Fix it properly, its a access road to the hospital, it should never be closed
S465	<p>These options only provide qualified protection against limited flooding events. When will somebody please do what the ratepayers of Northern Beaches council demand from the people whom they elect? Please don't ask us to tell you how to do the job you have been elected and generously paid to do. Just be leaders and managers, not peasants needing permission to manage this big council. Just do your job, do not ask US for leadership.</p>
S466	Increased importance of the Parkway as a commute and access to our new hospital make this a "no brainer" for me.
S467	The option of having only "one" flood event very 2 years is more far more attractive. The community has been affected for a very long time with this situation and with lost productivity. As the flooding currently interrupts private & public transport with increased travel time for commuters, energy used to travel further to be able to arrive at work or school on time. This has an knock on effect for other driving routes making them more congested during these flood events. More importantly emergency services trying to attend patients in the Northern Beaches in peak traffic times to pick up or take patients to the Northern Beaches Hospital, especially in an emergency with less direct routes and congestion - could be life threatening. This is certainly a more effective option in my view.
S468	Just get on with it!
S469	Seems to take an extremely long time to action. 4 years from Dec 2017 to late 2021 just for formal council approval & before works commence.
S470	Option to provide best traffic route unaffected by flooding is best for local residents and Northern beaches residents.
S471	<p>This will always be an issue into the future, the cost of doing nothing I believe will be higher i.e increased diversion, increased greenhouses gases due to diversions, future rainfall will also become increasingly erratic and more frequent due to climate change get it done right would be my recommendation good luck with this</p>
S472	<p>The additional cost of Option 4 does not appear to provide any additional benefit over Option 3 regarding road closures or management of the local flora and fauna. Option 5 whilst significantly more expensive appears to provide a significantly better road outcome and its implementation will ensure better management of local flora and fauna. When driving along the Parkway it is noticed that significant vegetation consists of varieties other than native vegetation. Therefore, as an alternative is it possible to implement a program to eradicate the non-native vegetation which will (over time) open up the flood plan and enable the natural distribution and transmission of the built up sediment (this is essentially a hybrid of Option 5).</p>
S473	This is a major road to the Northern Beaches northern most suburbs so the less flooding the better!
S474	<p>With the limited access roads to the hospital from the northern beaches it is critical that this road remain open for as much time as possible. Heavy rain events typically cause injuries and it's during these times that the road is required to be open. As one of three access roads to and from the northern beaches this road needs to remain open for as much time as possible. Every time the Parkway closes the other access roads become even more congested than normal resulting in gridlock. Many times I've had to return home due to being stuck in traffic for over 60 minutes and not even left the northern beaches.</p>
S475	I am aged 83 and have lived my life time in this area. What a total disgrace that this has continued especially with all the development, a hospital built where access is not possible when it rains from one major road, public transport constantly disruptedAnd therefore unreliable – a total disgrace on government that this has continued without resolution and yet constant money spent on improvements!

S476	Option 5 seems to me the most effective and cost-effective way forward. I believe we need to opt for the most effective flood mitigation measures available, especially in view of the need for emergency access to NB Hospital for those previously served by Mona Vale Hospital.
S477	I believe Option 5 is the right solution. The less closures we have the better for everyone concerned. This is long long overdue.
S478	why not do the job properly the first time?
S479	The Wakehurst Parkway should be designated a major road critical to allow fast access from the Northern Beaches to the new hospital. In addition the State Government and NB Council are increasing the population that use Wakehurst Parkway and it needs upgrading to two lanes and the flooding needs to be eliminated not just tinkered with as is proposed.
S480	This is an important cycling corridor. Can you please advise what consideration has been given to cyclists during the construction phase and to improving cycling safety with the completed project?
S481	Do it once and do it as well as it can be.
S482	Road closures have a major impact so should be minimized.
S483	Much better to spend money now with low interest rates and it will benefit everyone in the future .Do it correctly the first time.
S484	The closure of Wakehurst Parkway affects many areas. One of the most important is access to Northern Beaches Hospital. If there is an accident on Mona Vale Road and the Parkway is closed it could easily cost more than one life. The Peninsula needs better access which can be relied on. It is also an issue for anyone trying to get to work. When we have consistent heavy rain, which is often, the Parkway is always closed. This is third world and the people on the Northern Beaches deserve better.
S485	Need road widening to 4 lanes as well
S486	If we are going to spend money on this (which we desperately need to) lets do it properly. Regards
S487	spend up big This is long overdue
S488	option 5, we have waited long enough. Let us do it properlz now for a change!
S489	Major route to Northern Beaches Hospital so option 5 is badly needed.
S490	Go for the best. Guaranteed speedy access to the Northern Beaches Hospital is a priority for this and future generations.
S491	I am in favour of spending money to mitigate this problem as much as possible. It is particularly important now that the Northern Beaches Hospital is in operation.
S492	It is sad that the environment will be damaged but this work is necessary
S493	Very expensive but the only option to keeping this very important roadway open and not clogging up other roads when closed. Significantly, providing a more secure passage to Northern Beaches Hospital.
S494	Option 5 is the only way to go, one of two south bound roads and our only Hospital and the end. It should be 4 lanes as well
S495	other options not worthwhile
S496	Look the best bang for the buck. The road is a major route that is used by a lot of traffic, and if they are serious regarding the spit tunnel it make sense to have this road open as much as possible.
S497	Essential
S499	Hi [REDACTED], I think option 5 is the best only if the road is going to be widened at the same time to 2 lanes each way. I have lived on the Northern Beaches for 64 years and in that time Wakehurst Parkway has not been widened. With the new Northern Beaches Hospital at Frenchs Forest, surely this is a compelling case to finally widen the road. Yours faithfully,

S501	<p>Northern Beaches Council Dear Sir/Madam Confirm that the Wakehurst Parkway is a major and increasingly important thoroughfare. Reliable access for emergency vehicles journeying to Northern Beaches Hospital should be a paramount. The current road closures due to flooding on several occasions each year are not acceptable. Road safety is also an essential consideration. Would strongly support Option 5 as being the most cost effective. Yours faithfully</p>
S503	<p>Dear [REDACTED] Please acknowledge receipt of my submission concerning the current proposals for flood-proofing Wakehurst Parkway. Yours Sincerely [REDACTED] 17/07/2021 Dear [REDACTED] My name is [REDACTED] and I am a resident of Elanora Heights. My family and I use the Wakehurst Parkway many times each day and we do not support any of the current proposals for reducing flooding along Wakehurst Parkway because the community have not been supplied with any information about the costs and impacts of working on the road itself – either raising the level of the road, or providing bridges at critical points. Wakehurst Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a necessary link that needs to be properly funded by State Government. The proposals are band-aid solutions. The proposals should be that the RMS builds proposed levees or bridges on the road reserve, not Northern Beaches Council. It is the road that needs to be modified and the destruction of the natural habitat should be avoided at all costs. All the given proposals involve serious environmental destruction including removal of large areas of bushland (over 2 hectares). You cannot replace or replicate whole ecosystems. Some of the proposed removals are threatened ecological communities and these would be impossible to replace. The proposed alterations to Wakehurst Parkway would also have a deleterious effect to the water quality in Narrabeen Lagoon. The removed sediments would need to be trucked out and treated and the cost of de-contaminating those sediments is not revealed. There is no discussion of other solutions to the flooding issues - such as raising the road or building bridges at critical points. The RMS has studied some of those solutions and concluded that they are too expensive but there is no mention of them in the current list of options. The public deserves to know the cost of doing the flood proofing PROPERLY. The road should be elevated by bridges so that indigenous species can move from one ecosystem to the next ecosystem, otherwise disconnection occurs and native species become extinct. Yours Sincerely</p>
S504	<p>Hi, this won't be a long email. I remember the works that were carried out back in the '90s to install a levee bank along one section of the parkway where flood waters rise due to the low lying areas around it. In my opinion, it was a waste of time and money and it seems the options put forward are thinking along the same lines. Why shouldn't we consider raising the road height in that section so that flooding will no longer be a problem? Our Northern Beaches roads are already choked as we continue to cram more and more people into the beaches. When the Parkway closes, this is compounded and brings everything to a standstill. regards,</p>
S506	<p>Surely a raised roadway along the full section of road affected by flooding is the best option. Has this been seriously considered?</p>

S507	<p>Dear Council</p> <p>I am strongly opposed to all proposed options for Wakehurst Parkway flood mitigation based on the following:</p> <ul style="list-style-type: none"> · Wakehurst Parkway is a state road and as such the State Government should be taking on the work, rather than Council. · None of the proposals presented for comment will prevent all flood events, they will just reduce the number of flood events. This is poor roadwork and should not be contemplated given the environmental damage that the options will cause. · The environmental damage caused by all of the options includes destruction of large areas of bushland and exposure of contaminated sediments which would have to be treated. <p>Particularly due to the loss of Mona Vale Hospital as a fully working hospital facility, northern beaches residents need a permanent solution to flooding on Wakehurst Parkway that takes in the effects of climate change. For example: raising the road and constructing bridges that would allow animals to move safely under them. It is not fair or reasonable to ask the public to choose between a number of poor and inadequate solutions without giving residents any option of a comprehensive solution.</p> <p>Yours sincerely</p>
S509	<p>How about just raising the road. I would hate to see any trees chopped down and any changes. It is so special driving thought that bush land and lake</p> <p>Two other routes to northern beaches and look at the Mona vale road , all that distruction</p> <p>Thank you</p>
S510	<p>Hi [REDACTED]</p> <p>Please acknowledge receipt of the attached submission from Friends of Narrabeen Lagoon Catchment concerning the current proposals for flood-proofing Wakehurst Parkway.</p> <p>Thank you,</p> <p>Yours sincerely, [REDACTED]</p> <p>To ***</p> <p>June 5, 2021 Re: Proposals for Flood Proofing Wakehurst Parkway Dear [REDACTED]</p> <p>We do not support any of the current proposals for reducing flooding along Wakehurst Parkway because we have not been supplied with any information about the costs and impacts of working on the road itself – either raising the level of the carriageway, or providing bridges at critical points. There are some parts of the proposals that we may, in future, support such as improving the culvert near Oxford Falls Grammar School but we want to see that being presented as a proposal that provides a long-term solution and involves modifying the road.</p> <p>Our objections to the current suite of proposals are that ...</p> <ol style="list-style-type: none"> 1. None of the presented proposals will prevent ALL flood events along the Wakehurst Parkway, particularly if you take into account the increasing frequency of serious storms and flood events predicted due to Climate Change. 2. In common parlance, the proposals are "Band-aid Solutions" that fit within the given budget provided by the Roads and Maritime Services (RMS) for now. 3. Wakehurst Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a crucial link that needs to be properly funded by State Government. 4. The Northern Beaches Council has been requested to provide solutions that involve using the surrounding bushland - letting the RMS off the hook from having to do anything about the road itself. At the very least, the proposals ought to be that RMS builds any proposed levees or bridges on the road reserve, not Northern Beaches Council. 5. The RMS may say that the water comes from the surrounding environment and that the administrators of the bushland must solve the problems but actually, it is the alignment of the road that has caused the modification of the surrounding environment that now causes the flooding. It is

	<p>the road that needs to be modified not merely the surrounding environment.</p> <p>6. The flooding occurs at several different locations along the Wakehurst Parkway. There may need to be different solutions for each location but the community needs to see all the options.</p> <p>7. All the given proposals involve serious environmental disturbance including removal of large areas of bushland (over 2 hectares). Removal of the top soil in which the bushland is growing, makes revegetation more artificial and difficult to replicate whole ecosystems. Some of the proposed removals are of threatened ecological communities so these proposals are even more worrying.</p> <p>8. Disturbing and exposing contaminated sediments is a risk to the water quality in Narrabeen Lagoon. The removed sediments would need to be trucked out and treated and the cost of de-contaminating those sediments is not revealed. This is a serious omission when the public is being asked to evaluate the proposals.</p> <p>9. There is no discussion of other solutions to the flooding issues - such as raising the road or building bridges at critical points. The RMS has studied some of those solutions and concluded that they are too expensive but there is no mention of them in the current list of options. The public deserves to know the cost of doing the flood proofing PROPERLY.</p> <p>10. If the road were elevated by bridges, animals could move through underneath. The road needs to be redesigned to allow for animals to move safely from one area of bushland to another.</p> <p>Conclusion: It is not a satisfactory process to ask the public to choose between bad solutions and worse solutions without revealing the full costs of those proposals and the comparative costs and environmental impacts of a good or better solution.</p> <p>Yours sincerely,</p>
S511	<p>After attending the zoom and Tramshed plans being put forward by Council, I was rather torn by the outcomes.</p> <p>I have lived in this area for more than 40 years and have always found the drive along Wakehurst Parkway an uplifting experience, especially in the evening twilight returning from work from the city area. I have watched the various attempts to clean up the area by various councils ie weed control (morning glory and lantana to name a few) and native plantings.</p> <p>The flood events were, for me, just part of life, necessitating my travelling by a different route depending where I was going. Not a problem at all. There was always adequate warning and time to change plans. (Just the fact that there was prolonged torrential rain in the area was a good alert.)</p> <p>The choice of plans outlines the fact that none will fully ensure no flooding at all. So why are we destroying so much of this amazing environment to achieve a mediocre result? Also the visual waterproof barriers along the lake will destroy the natural beauty of the area.</p> <p>I believe the road is a NSW Govt road, but the NSW Government is only offering the council a 'grant' to fix the problem. Most of the outcry is partly the relocation of our public hospital from a very accessible position on a main road linking Palm Beach to Manly, with full public transport, to a place where there isn't easily accessible transport for peninsular dwellers.</p> <p>The NSW Govt needs to 'fix' the flooding issues of Wakehurst Parkway with a high level road or bridge that will also address future climate change flooding and sea level rise, which will affect the lagoon.</p> <p>I was torn because I realise the building of this better outcome will cause huge damage to the environment also, but at least the end result would set up a better outcome for the environment to replenish itself, providing access under it for fauna migration etc. Not to mention effectively tackling the flooding problem permanently, and even widening the road to allow for emergency or overtaking lanes.</p> <p>So, please don't accept the offer to do this bandaid solution, the heartache and pain will have minimal benefit against massive environmental destruction, which will need to continue into the future.</p> <p>Thank you,</p>
S512	<p>The Wakehurst pw requires safe and environmentally sensitive lighting. Lighting should minimise the impact of harmful lighting on nocturnal native animals while being safe and effective.</p>

S513	<p>Dear Sir/Ms,</p> <p>I wish to say that I am astounded at the Council publishing such poor options in your newsletter today.</p> <p>Council should be embarrassed!</p> <p>Given that the Northern Beaches Hospital is now situated at Frenchs Forest, the ONLY satisfactory proposal should be for a complete reconstruction to provide a dual carriageway between Narrabeen and Frenchs Forest, with the flood prone section being elevated above the highest flood prediction levels.</p> <p>Nothing less.</p> <p>The NSW Government should be funding this, NOT Council. They built the Hospital at Frenchs Forest instead of rebuilding and retaining Mona Vale Hospital as a tier 1 facility.</p> <p>The proposals you have published are absolute rubbish, and will cause nothing but ridicule of Council in our community, as well as a complete lack of faith in the NSW Government and our local Member.</p> <p>Man Up Council, this is a NSW Government problem.</p>
S514	<p>Northern Beaches Greens submission on the Wakehurst Parkway Flood Mitigation feasibility study July, 2021</p> <p>Thank you for the opportunity to comment on the Wakehurst Parkway Flood Mitigation feasibility study.</p> <p>Wakehurst Parkway is a critical piece of state infrastructure Northern Beaches Greens is opposed to any of the options in the current Wakehurst Parkway Flood Mitigation Plan (apart from leaving it as is) because they would cause an environmental disaster and fail to completely flood proof the road anyway.</p> <p>However, we can't afford to leave the parkway as is. It is now two and a half years since the NSW government closed acute services at Mona Vale Hospital, which meant the road became the shortest route to the closest emergency department - at Northern Beaches Hospital - for residents on the coastal strip between Palm Beach and Narrabeen.</p> <p>Yet that road currently floods up to seven times per year on average, as the Wakehurst Parkway Flood Mitigation proposal notes. Because it is only single carriageway in either direction, it also closes in cases of road accidents - as well as during bushfires.</p> <p>The road is therefore now a critical piece of state infrastructure, and the NSW government should take responsibility for it and provide sufficient funds to end flooding without destroying the surrounding environment.</p> <p>The local council should not be left to carry any of the financial burden and responsibility for construction.</p> <p>Environmental problems</p> <p>Environmentalists and other residents value the bushland and creeks surrounding this road for the wildlife habitat they provide, Aboriginal sites and their natural beauty.</p> <p>Work towards Options 2 to 5 would destroy the ecological communities of the valley floor and a small forest's worth of trees – equal to at least 2.41 hectares. It would involve the removal of large areas of dense bushland containing valuable ecosystems – such as the threatened ecological communities of Swamp Sclerophyll Wetlands, Freshwater Wetlands, Swamp Oak Floodplains, and Coastal Saltmarsh.</p> <p>With some of the most biodiverse ecosystems in Greater Sydney, the area provides habitat for nationally threatened species including the Southern Brown Bandicoot, Spot-tailed Quoll, Giant Burrowing Frog, Swift Parrot, and Australian Little Bittern. Habitat would also be destroyed for many NSW threatened species, including the Powerful Owl, Masked Owl, Barking Owl, Red-crowned Toadlet, Black Bittern, Glossy Black-Cockatoo, Squirrel Glider and others.</p> <p>Contaminated sediments, including benzene and lead, would also be exposed by the earthworks, Neither plans for their removal nor possible effects on species in Middle Creek and Narrabeen Lagoon have been assessed. Any sedimentation of the lagoon or its catchment must be prevented in</p>

	<p>an upgrade of the parkway.</p> <p>Neither has a full survey of Aboriginal sites been carried out (although 58 are already known) and some could be at risk. We must not permit damage to occur to any more sites close to road works, as has occurred with the Mona Vale Road upgrade.</p> <p>Sea level rise projections of up to two metres by 2021 also suggest that more of the Wakehurst Parkway could become flood prone or submerged in the not too distant future, so that the scope of the proposed work might soon be insufficient.</p> <p>Increased traffic²</p> <p>Furthermore, whilst Wakehurst Parkway, before the Covid-19 pandemic, carried significant amounts of traffic particularly in peak periods, that may well increase if the Beaches Link Tunnel goes ahead and funnels traffic onto the northern end of the parkway.</p> <p>The solution</p> <p>As little as many of us want the Wakehurst Parkway to change, state government decisions about local hospitals necessitate upgrading this critical piece of state infrastructure. However, rather than leaving it to the council to sort out, the government should take responsibility for the project and allocate adequate funding for a less destructive solution - perhaps utilising prefabricated bridges that are lifted into the valley. This would also enable wildlife to safely pass from one side of the road to the other beneath the bridges. Northern Beaches Council should advocate to the government on behalf of residents for this to happen.</p> <p>However, the community must not be expected to carry the cost of such an upgrade and under no circumstances should the Wakehurst Parkway become a tollway. Drivers and their passengers should not have to pay to access the hospital.</p>
S515	<p>To whom it may concern</p> <p>Wakehurst Parkway Flood Mitigation</p> <p>The plan in question is a backwards plan. Planning for the future would require maintenance of as much remaining natural bushland as possible. The addition of more concrete and loss of bushland will increase the frightening, negative effects of flooding, not only on the Narrabeen, northern end of the Parkway but around the flat wetland area around Narrabeen Lagoon and all the buildings surrounding the Lagoon.</p> <p>The planning must take climate change into account. Widened roads add to the 'heat island effect' and encourage many more cars onto the roads when we should be encouraging more reliance on passive transport and improved reliable public transport.</p> <p>Wakehurst Parkway should be well maintained in its original form but restricted to walking, bicycles and perhaps (electric) motorcycles which would have a better result in protecting dwindling local flora and fauna and remain as an important 'lung' for the northern beaches.</p> <p>It is clear to see the disastrous heartbreaking result of widening Mona Vale rd and the loss of special bushland and danger to native species there. It will definitely create very much heavier traffic on that route, inevitably driving up roadkills, traffic accidents and climate chaos.</p> <p>Do not let this happen to the beautiful environmentally valuable existing bushland of Wakehurst Parkway. Preserve this special 'country' road into the future with a view to ameliorate some of the terrifying results of climate chaos.</p> <p>Please take heed of what we've just witnessed in Germany and recently around the globe.</p> <p>Yours faithfully,</p>
S516	<p>Please find attached my submission in response to the Wakehurst Parkway Flood Mitigation Study. I was unable to do this via the Have our Say page because I do not support any of the current options, and the online response form would not permit me to progress beyond this question without completing it.</p> <p>Submission in response to Wakehurst Parkway Flood Mitigation Feasibility Study Submitted by: [REDACTED] 1 July 2021</p> <p>This submission is made as a private citizen living in Fairlight and as a user of the Wakehurst Parkway to travel to various commitments across the Northern Beaches. I make my submission based on a</p>

	<p>30+ year career as a research scientist, national environmental liaison officer for a national NGO, fulltime consultant to a former Federal Environment Minister, then 20+ years as a partner in a successful small environmental consultancy business specialising in bringing together diverse interests involved in projects requiring sustainable outcomes. Nine years as a Manly Councillor, during which I chaired both the Land Use Management Committee and the Sustainability Committee added to my knowledge and understanding of Local Government and its interaction with State and Federal governments.</p> <p>Inappropriate Terms of Reference for Mitigation Feasibility Study It is extremely unfortunate that the Mitigation Feasibility Study was narrowed to the consideration of options that, while they will “help to protect the road from flooding”, will at the same time “have significant environmental impacts” (Council background information).</p> <p>Climate change Limiting the Mitigation Feasibility Study to flood protection options “up to 1-in-2 years” is inadequate. While this may represent a reduction in an average over time, “at present” road closures due to flooding occur “up to six or seven times per year on average” and this can only be expected to increase in the face of climate change. It is of major consequence that the Mitigation Feasibility Study “has not taken account of climate change (potential increase in rainfall intensity) or sea level rise” – both of which are widely projected for the Sydney region, with an increase in major event frequency apparently already occurring.</p> <p>Native vegetation removal Each of the options considered ‘feasible’ will result in the removal of a significant area of vegetation, ranging from 2.41ha to 3.47ha, much of it State and/or nationally threatened ecological communities and/or significant habitat for threatened species. To this must be added further clearing that will be necessary for removal of sediment. This represents an unacceptable impact on species and ecological communities already at risk of extinction, particularly when it is the road alignment and the modifications associated with it, rather than the bushland, that have caused the flooding.</p> <p>Environmental impacts & approvals The impacts of the proposed options are clearly identified within the Mitigation Feasibility Study (p.34). However, while the EPBC Act is referred to, listings of several affected species under the EPBC Act are not made clear. The impacts on Swamp Sclerophyll Forest on Coastal Floodplains (EPBC Endangered listing, Oct 2019), Coastal Swamp Oak Floodplain Forests (EPBC Endangered listing, Nov 2018) and Subtropical and Temperate Coastal Saltmarsh (EPBC Vulnerable listed 2013) require that any proposed projects are referred for consideration by the Federal Minister for the Environment, as well as at State level. As noted above, the Mitigation Feasibility Study acknowledges that the proposed options “will have significant environmental impacts” indicating that the Federal Minister must determine whether they “have or will have”, or “are likely to have” “a significant impact on a listed threatened ecological community”.</p> <p>Greater effort (including appropriate seasonal surveys) is also required in relation to species identified as potentially occurring along the creekline affected by the proposed flood mitigation projects which are also listed under the provisions of the EPBC Act – <i>Deyeuxia appressa</i> (EPBC, endangered), <i>Triplarina imbricata</i> (EPBC, endangered), <i>Haloragodendron lucasii</i> (EPBC, endangered), <i>Persoonia mollis maxima</i> (EPBC, endangered), <i>Leptospermum deanei</i> (EPBC, vulnerable) and <i>Melaleuca biconvexa</i> (EPBC, vulnerable).</p> <p>Similarly, impacts on the Eastern Osprey (listed as a Migratory Species under the EPBC Act), the Grey Headed Flying Fox (Vulnerable under the EPBC Act), and the Large Eared Pied Bat (Vulnerable under the EPBC Act) require Federal referrals. Referral Guidelines for EPBC listed migratory species (Sept 2015, p.2) clearly contain an objective to “retain the habitats and resources necessary for these species to successfully migrate and, where appropriate, breed through their natural range in Australia” – an objective that would not be achieved if the proposed flood mitigation measures were to be implemented.</p> <p>Over-reliance on ‘biodiversity offsets’ Throughout the assessment of flood mitigation options, there is a strong reliance on ‘environmental offsetting’. While this is permitted under the provisions of the NSW Biodiversity Conservation Act, the requirement is for a hierarchy of actions. The Offsetting process (using the Biodiversity Development Assessment Report process, BDAR) requires that avoidance and minimising of</p>
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	<p>environmental impacts are considered ahead of any decision to move to 'offsetting'. However, the narrow set of alternative options for flood mitigation included in the Mitigation Feasibility Study means that this hierarchy of environmental considerations has not been addressed. Too often 'offsetting' is used as an easy way out for development, however, the whole offsetting process is flawed in significant ways, as highlighted by EDO's Head of Policy & Law reform, Rachel Walmsley¹ and others.</p> <p>Contaminated sediments</p> <p>As the Mitigation Feasibility Study (p.38) identifies "Land contamination presents a major consideration". As is common in areas impacted by road runoff, the material proposed for excavation has "elevated benzo(a)pyrene, nickel and lead content, making it unsuitable for recycling". The costs of decontamination and/or disposal for these sediments does not appear to be included in the assessment of options. That this could be substantial is recognised in consideration of the residual risks within the Study report, which acknowledges the possibility that disposal costs could "likely render the option unfeasible due to cost" (p.7).</p> <p>When these issues are combined with advice from Pietsch and Soil Conservation Services (see p.35 of the Mitigation Feasibility Study) that "dredging of the channel is not recommended, as it could cause upstream instability and remobilisation of the store of sediment on the floodplain" and the fact that the dredged channel "could simply infill if some or all of the [sediment in the floodplain sink] was retained within the channel" make this an undesirable approach.</p> <p>██████████: https://www.edonsw.org.au/political_endorsement_of_extinction. No current option is acceptable. The community is being asked to provide feedback on a limited series of flood mitigation options, all but one of which are deemed 'feasible' "subject to acceptance of environmental impacts and the perceived or actual cost/benefit". However, the 'residual risks' (summarised on p.7 of the Mitigation Feasibility Study) are numerous and of considerable concern which has not been addressed.</p> <p>To spend further ratepayer funds on any option that will involve millions of dollars for works that will not prevent interruptions to traffic flow due to flooding is unacceptable.</p> <p>This conclusion is reinforced because the options offered are contrary to Northern Beaches Council's Bushland and Biodiversity Policy. Few, if any, of the Principles underpinning that policy are met by the flood mitigation options proposed. The options certainly do not "maximise the retention of bushland and biodiversity assets across the northern Beaches" (Principle 1) nor do they "recognise the necessity of proactive measures to protect and restore these assets" (Principle 1). Nor are "Conservation of biological diversity and ecological integrity" a "fundamental consideration" (Principle 5) in what has been offered for consideration. Decisions to choose among the options considered are not "guided by avoiding serious or irreversible damage to the environment" or the "proper assessment of risk-weighted consequences of the various options" (Principle 6). This latter, as the fundamental core of the precautionary principle, is required under the provisions of State and Federal environmental laws.</p> <p>As is acknowledged in Council's response to Frequently Asked Questions, "mitigating the impact of these [more intense floods – likely as a result of climate change] events will need significant amounts of investment...".</p> <p>Given that the Wakehurst Parkway is a State asset, which provides an important link between the Northern Beaches and other parts of Sydney, and services both a regional hospital and a growth area at Frenchs Forest, flood mitigation should be properly funded by the State Government (if necessary with support from the Federal Government). Elevation of the road by bridges at critical flood points should be properly assessed and costed, and the environmental and economic costs of more permanently flood-proofing the road made public before any decision to proceed is considered. Council's role in achieving this outcome is largely to advocate for broader considerations, and for the necessity of State and/or Federal funding to achieve more appropriate outcomes</p>
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S517	<p>Please look at the highlighted part in the attached screen grab, and then fix it quickly, before anybody else notices.</p> <p>██████████ ratepayer and mathematician.</p> <p><i>Highlighted in attachment "At least two closures on average per year"</i></p>
S518	<p>Northern Beaches Council The Hon Robert Stokes MP The Hon Brad Hazard MP Please find my response to the Northern Beaches Council recent public consultation on flooding of the Wakehurst Parkway. I am also sending this to our two local members as the Wakehurst Parkway is the responsibility of the NSW government and TfNSW should have taken the lead. I request TfNSW to fully informing up on their plans for this major road. I am available further discussions with MPs, Council and TfNSW officers if needed. Regards</p> <p>Submission to Northern Beaches Council The Hon Robert Stokes MP The Hon Brad Hazard MP Following the recent public presentations by Council and their request for public feedback I wish to submit my views. However, as this is a TfNSW major road I also submit this to my local members as upgrade of this road is really the responsibility of the NSW Government. I have had a life-long association with this the area and travelled this scenic road many thousand of times. I am also a civil engineer with experience in road design, road safety, flood mitigation and addressing environmental impact of civil construction in both design and construction.</p> <ol style="list-style-type: none"> 1 .The amount of money allocated is insufficient to address the frequent occurrence of flooding. 2 .An upgrade to just 1-2 year flood occurrence is not acceptable for a major road in a major First World city. 3 .NfNSW should provide to Council and the public full details of their plans to upgrade this road to an acceptable standard. For flooding better than once in 50 years occurrence. 4 .Once NfNSW has provided their detailed plans to Council and the public, any expenditure to address current flooding MUST be an incremental part of this plan. 5 .I accept that the recently completed upgrade of Warringah Road at French Forest and the now under construction of Mona Vale Road upgrade will improved access to the Northern Beaches and our new hospital. However, major work on the Wakehurst Parkway should immediately follow on the completion of the current Mona Vale Road work. 6 .The Beaches link will provide more traffic on this road and it upgrade MUST be completed well in advance of this project. An other reason not to delay any further. 7 . May I suggest with the small amount of money provided the Oxford Falls section should be completed first as it could be fully completed with funds currently available. With what left over commence doing the flood mitigation at the Academy of Sport Intersection section. 8 . The curves section is the the site most frequently flooded, However what is proposed is unacceptable as only short-term, a dirty-fix, has unacceptable impact of adjacent native vegetation and not part of a long tern solution. What is needed is to raised the road up to say 1.5m to be above a 1 in 50+ year flood level AND remain within the existing road footprint. 9 .On road safety, TfNSW must up do safety upgrades on some Wakehurst Parkway intersections, in particular at Oxford Falls Road West and exits to recreation areas on Middle Creek and Deep Creek. I have seen to many near misses for these hazards to be ignored with current traffic levels on this 80km/h main road.10 .May I suggest to Council, its priority should be to replace the Oxford Falls Road West floodway with a bridge or large culvert. The risk of a sudden flash flood with the nearby downstream Oxford

	<p>Falls makes this a major safety hazard which urgently needs to be addressed. Many city drivers just don't understand the extreme risk of driving in flood waters.</p> <p>11 . On lesser matter, I have noted recently more dead branches than usual on trees overhanging the road just waiting to fall in a storm. I trust be referred to the TfNSW maintenance contractor.</p>
S519	<p>The [REDACTED] is actively involved in the protection, propagation and promotion of our endemic flora and Australian flora where appropriate.</p> <p>The Wakehurst Parkway, that lovely road through the bush to the top of the Northern Beaches is to all of us very familiar and the flooding of it is equally well known.</p> <p>The richness of flora species along the parkway, indicates several different ecological communities with some of them known as endangered.</p> <p>The flood prone area as such is equally rather uncommon as most of our natural swap lands have been filled in, mostly by being used as a tip.</p> <p>We strongly oppose the clearing of over 2.5 ha of native vegetation to remove the sediment to increase the faster drainage within the lower Middle Creek basin.</p> <p>We recognise the inconvenience of the occasional flooding of the road but the protection of our environment especially within such a biodiverse location deserves clearly priority.</p> <p>We hope further that the upgraded Mona Vale road will provide quick and easy alternative access to Northern Beaches Hospital and that the Parkway does not have to be relied on at times of flooding. For these reasons we favour the 'Do Nothing' option.</p>
S520	<p>Dear Council,</p> <p>Re "have your say" on Wakehurst Parkway Flood Mitigation.</p> <p>There needs to be another option, that is to do the job properly. Raise the road above flood levels. All other options are half baked solutions which do not solve the flooding problem.</p> <p>I also don't understand why council are involved in this when it is a main road and should be a State Government responsibility.</p> <p>Regards,</p>

S521	<p>WAKEHURST PARKWAY FLOOD MITIGATION</p> <p>The [REDACTED] does not support application of mitigation activity for the Wakehurst Parkway. There appears to be limited benefit for the proposed work with potential significant impact to ecological values of the area.</p> <p>Ecological impact</p> <p>Documented impacts provided by the draft Wakehurst Parkway Flood Mitigation Feasibility Study clearly identify environmental impacts to aquatic communities from any intervention to remove sediment.</p> <p>Options 2 through 5 require clearing vegetation which increasing deliver impacts to threatened plant species from two to four plant community types, noted as Swamp, Sclerophyll Forest, Freshwater Wetlands, Swamp Oak Floodplain forests, and Coastal Saltmarsh.</p> <p>Do Nothing Option</p> <p>Identified road closures may occur 6 to 7 times a year. Individual travel required to use the alternative routes is negligible. Estimated additional travel times northbound for residents at Oxford Falls and travellers from or through Frenches Forest (via Dee Why or Wheeler Heights) is 7 mins. There is no additional travel time for Seaforth residents or travellers from suburbs south of Seaforth via the Spit Bridge taking the alternative via Dee Why. Naturally the same applies for southbound journeys.</p> <p>Conclusion</p> <p>Human intervention is the largest threat to the catchment of Narrabeen Lagoon. This catchment area was noted by the Hon. Bob Debus as "Sydney's largest coastal lagoon, home to a rich array of plant and wildlife species ... that should be protected forever". Actions projected by this study will deliver degraded environmental outcomes to provide negligible benefit. Any work to mitigate flood activity defies logic and should not proceed.</p> <p>Yours sincerely,</p>
S522	<p>To whom it may concern,</p> <p>Please do the job properly, please do it right for the land, animals rate paying/tax paying people. Don't save a buck and impact the environment. Do it properly once and then its done. Please don't put greed before our planet!</p> <p>Thanks,</p>

S523	<p>This is a joke, you are forcing people to make a choice between bad and worse, take Option 6 and fix it properly.</p> <ol style="list-style-type: none"> 1. None of the presented proposals will prevent ALL flood events along the Wakehurst Parkway, particularly if you take into account the increasing frequency of flood events predicted due to Climate Change. 2. In common parlance, the proposals are "Band-aid Solutions" that fit within the given budget provided by the Roads and Maritime Services (RMS) for now. 3. Wakehurst Parkway is a STATE road and, with the Hospital and proposed Frenchs Forest area development at the top of the hill, the Parkway is a crucial link that needs to be properly funded by State Government. 4. The Northern Beaches Council has been requested to provide solutions that involve using the surrounding bushland - letting the RMS off the hook from having to do anything about the road itself. 5. The RMS may say that the water comes from the surrounding environment and that the administrators of the bushland must solve the problems but actually, it is the alignment of the road that has caused the modification of the surrounding environment that now causes the flooding. It is the road that needs to be modified not the surrounding environment. 6. The flooding occurs at several different locations along the Wakehurst Parkway. 7. ALL the given proposals involve serious environmental disturbance including <ol style="list-style-type: none"> a) removal of large areas of bushland and b) exposing contaminated sediments that would need to be treated (and the cost of de-contaminating those sediments is not revealed) 8. There is no discussion of other solutions to the flooding issues - such as raising the road or building bridges at critical points. The RMS has studied some of those solutions and concluded that they are too expensive but there is no mention of them in the current list of options. The public deserves to know the cost of doing the flood proofing PROPERLY. 9. If the road were elevated by bridges, animals could move through underneath. The road needs to be redesigned to allow for animals to move safely from one area of bushland to another. 10. It is not a satisfactory process to ask the public to choose between bad solutions and worse solutions without revealing the costs and the environmental impacts of a good or better solution. Permanently flood-proof the road ought to be revealed and discussed before any decisions are made.² <p>Have a great day. Regards,</p>
S524	<p>I am confused to know why the project engineers have not considered the erection of one of the suspended roads thru the areas which are subject to flooding.</p> <p>I refer to a design similar to the Kempsey bypass (NSW) where the suspended road supported by pilons causes no harm to wildlife there or any other artifacts which could be present in Wakehurst. Perhaps it could be a cost factor but if they just got on with it instead of spending so much on investigations and consultations it could be reasonable and completed in a timely and efficient manner.</p> <p>Thankyou</p>

S525	<p>Hello</p> <p>I've attached a submission from the [REDACTED] in relation to Wakehurst Parkway Flooding. Kind regards</p> <p>“Wakehurst Parkway Flood Mitigation” WAKEHURST PARKWAY FLOOD MITIGATION</p> <p>The [REDACTED] is a community-based group, with a membership of approximately 300 representing the interests of both owners and tenants resident in Palm Beach and Whale Beach, as well as local businesses.. It is grateful for the opportunity to put forward its views on the options being considered by the Council for flood mitigation on Wakehurst Parkway North.</p> <p>The alternative proposals for flood mitigation along Wakehurst Parkway North are well informed by the comprehensive and detailed report from Royal HaskoningDHV.</p> <p>FLOOD MITIGATION OPTIONS</p> <p>We take the following positive reassurances from the report: -</p> <ol style="list-style-type: none"> 1. There is no point in considering options which do not entail removal of overbank sediment from Middle Creek, because this would be a failure to remove one of the causes of the flooding on the Parkway. The failure to remove the sediment could also lead to further sedimentation in the future. In addition, reducing the frequency of flooding from 6-7 times a year to four or two times per annum does not provide an adequate solution to the problem and is not value for money. This would remove from consideration Options B1, B2, B5 and B7 in relation the Bends Area of the Parkway. 2. Removal of the overbank sediment will provide an opportunity for replanting with indigenous native plants whilst at the same time resulting in the removal of a significant population of non-indigenous weeds, such as privet and lantana. 3. A method is recommended for the preservation of significant trees, such as those providing nesting holes and very old Livistona palms. Social media talk of the removal of 2,000 trees does not seem to be justified by the proposals in the report. 4. The report believes that safe operating methods will significantly reduce any risk to endangered fauna and flora in the Bends area to an acceptable level. The report concludes that there is no such risk in the Oxford Falls area. 5. The S1 Option at the Sports Complex would only be required if the implementation of measures at the Bends and Oxford Falls produces increased downstream flooding. At present flooding at the Sports Complex is a once in two years event. <p>The report recommends adoption of Option B3 for the Bends area (the most frequently flooded area on the Parkway) plus O1 for the Oxford Falls area because this will reduce the flood risk to one per annum, for a total cost of \$13.3 million. This combination of options is described as the best performing combination, a statement which is regrettably not explained.</p> <p>We recommend that the Council should adopt Options B4 for the Bends Area and O2 for Oxford Falls because this doubles the flood mitigation effect from once every year to once every two years, for an increase in cost of less than 16%, to \$15.4 million. Option B4 causes no greater traffic disruption or environmental impact than Option B3. We believe this combination is better value and offers greater security to motorists and residents. In addition, Option B4 includes a separate cycleway which will improve safety for cyclists and motorists and improve traffic flow.</p> <p>FLOOD PREVENTION</p> <p>No option of complete flood mitigation was considered by Royal Haskoning. For completeness and to allow for fully informed decision-making, this should have been part of their remit and the option should be explored.</p> <p>EMERGENCY ACCESS</p> <p>The northern end of the peninsula has a particular sensitivity to closures of the Wakehurst Parkway. Our remote location at the northern tip of NBC involves greatest travelling distance to Northern Beaches Hospital – a distance that can ill-afford extension due to detours when racing the clock for emergency treatment. As such, we raise the specific matter of emergency access, in the hope that the engineering design can somehow accommodate this to the greatest extent possible.</p> <p>Whatever solution is chosen for improving the road, we imagine this would involve a raised shoulder to be ordinarily used as a footpath. The consideration we raise is whether this raised shoulder could be designed in a way that can accommodate emergency “contraflow” access for emergency vehicles only. The idea is that while a flood event might close the road to general traffic for 48 hours,</p>
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	<p>emergency access might only be disrupted for a fraction of this 48 hours.</p> <p>ROAD WIDENING</p> <p>The report mentions the “high volume of traffic” on the Parkway but a consideration of widening the road to four lanes was obviously beyond their remit. Nevertheless we would like to repeat our recommendation in our BeachesLink submission that widening the road to two lanes in each direction must be considered as part of the BeachesLink construction because the Link will produce even higher levels of traffic on Wakehurst Parkway and a four-lane road is less likely to be blocked by accidents (of which there have been 29 in the period 2013-2017 per the Royal Haskoning report). As with the emergency lane recommendation, the reasons for this recommendation are greater security of access to the Hospital for emergency cases, greater safety for motorists and a better and more efficient traffic flow, with less delay, particularly during peak hours.</p> <p>█</p> <p>Thank you for the opportunity to put forward our views.</p>
S527	<p>ADDENDUM....</p> <p>Sent: Wednesday, June 16, 2021 9:26 PM</p> <p>Subject: THE WAKEHURST PARKWAY AND ITS FLOODING...</p> <p>TO WHOM IT MAY CONCERN:</p> <p>Dear Sir/Madam,</p> <p>Several years ago - last century, actually - I suggested to Council Engineers of the then Warringah Council, that they invite an informed solution to the Parkway's flooding from a Dutch Consultant. To leave this temporary road, originally planned to become an EIGHT LANE HIGHWAY to allow space for the increasing number of cars on our roads, deteriorating due to repetitive flooding and daily traffic chaos, was surely irresponsible.</p> <p>However, despite the fact that 26% of the Netherlands is below sea level and flooding everywhere has now not only been prevented but a great amount of land has been reclaimed, my suggestion was ignored.</p> <p>The cost of widening the Parkway AND flood proofing it, has in the meantime grossly increased; yet with a larger population here nowadays there is no other way but to follow advice from these experts who consult all over the world; before lives of patients and newborns are lost trying to reach our ill-situated one and only hospital; not to mention traffic accidents and consequences.</p> <p>This project needs to be undertaken now, today, rather than tomorrow, without any further procrastination. The cost will need to be absorbed by the NSW Government, the RMS and local council; and will only increase with time if this is not tackled urgently, for every user's sake!</p> <p>Sincerely,</p> <p>█</p> <p>PS - An extra lane could be built to split from the main arterial road and go directly to the hospital, allowing emergency vehicles to avoid any traffic congestion and/or flooding event</p>
S528	<p>A solution must be found that eliminates flooding, reducing the frequency of flooding is not good enough. None of these solutions are acceptable.</p> <p>At the same time the road must be upgraded so that is safe it is one of the most dangerous roads in Sydney narrow and poorly lit.</p> <p>The survey is flawed as it should have an option for none of the options and go back to the drawing board. To Do you nothing does not cover this option.</p> <p>Imperative that something is done as Wakehurst Parkway is the major access route to the Northern Beaches Hospital. It is totally unsatisfactory that it is closed at least five or six times a year sometimes over 24 hours.</p>
S530	<p>My apologies for a late submission but I was waiting for your answer before I put my submission in I am still extremely concerned about the potential for the contaminated soil in the middle Creek catchment. I don't feel that we can really make a proper assessment until we know the extent and amount of contaminants in this catchment. I also am very much opposed to loss of bushland as I feel bushland is under assault right across the northern Beaches. This means that I go for the option of doing nothing at this stage until further information is available</p> <p>Many thanks</p>

	Kind regards
S531	<p>I am aware that comments are closed for this project but please accept my comments. I wish to request the Council to Do Nothing – any solution needs to fix the problem with minimal ecological disturbance.</p> <p>The options B5, B2+01 and B3+02+S1 will not solve the flooding issue but will cause serious damage to Narrabeen Lagoon and its catchment.</p> <p>Mona Vale hospital was defunded by the State Government and now we have to travel to Northern Beaches Hospital so the State Government should fund this.</p> <p>With the widening of Mona Vale Road and Wakehurst Parkway there has been an enormous amount of clearing of native vegetation and loss of habitat in Pittwater. In NSW our biodiversity is in crisis. Each Council area needs to protect and preserve its local biodiversity.</p> <p>The proposals will impact Swamp Sclerophyll Wetlands (Endangered Ecological Community), Freshwater Wetlands (Threatened Ecological Community), Swap Oak Floodplains (Threatened Ecological Community) and Coastal Saltmarsh (Endangered Ecological Community) plus 15 threatened species Powerful Owl, Greater Sooty Owl, Barking Owl, Re-Crowned Toadlet, Black Bittern, Glossy Black-Cockatoo, Squirrel Glider, Grey-headed Flying Fox, Eastern Bentwing-bat (all confirmed in the area) and Southern Brown Bandicoot, Koala, Spot-tailed Quoll, Swift Parrot, Masked Owl and Australian Littler Bittern (unconfirmed occurrence).</p> <p>Deep Creek Reserve is located along Wakehurst Parkway and is one of the Northern Beaches highest conservation reserves contributing to a regional corridor for an abundance of native animals. Contaminated sediment will be released into the environment and impact the lagoon and surrounding forest.</p> <p>Impact on water courses being obstructed and redirected will alter habitats and ecologies irreversibly and are not really understood.</p> <p>Indigenous heritage – it is not clear what the effects will be on indigenous heritage.</p> <p>The Council has declared a Climate Emergency – we need to protect our ecology. Wetlands are known to be some of our most important carbon sinks.</p> <p>We need new, better thought out options that protect our environment such as bridges at critical points.</p> <p>We have been given options that are unacceptable.</p> <p>Thank you for the opportunity to comment.</p> <p>Yours sincerely</p>
S532	<p>Dear [REDACTED]</p> <p>I do wish Council would stop asking rate payers to decide between complex technical solutions for issues relating to the environment of the Northern Beaches. The average ratepayer does not have the expertise to make an intelligent judgement based on the scant evidence usually presented by Council in these cases. Approximately four years ago Council developed three complex options relating to the dredging of Narrabeen Lagoon and asked ratepayers to vote on the option preferred. Residents did not have the technical expertise to make that choice and the voting tended to be on emotional lines – was the concept of dredging something that was acceptable to the individual – or not? Few people were capable of assessing the options and the result was a tied vote. Council took the view that none of the options should be pursued – and the lagoon has been abandoned, allowing it to become increasingly shallow and further degraded. Council's role should be to assess the options and present the one that makes most sense for comment by ratepayers. I am disappointed that Council has again placed various options before ratepayers regarding flood proofing Wakehurst Parkway – and asked for a vote. In this instance I imagine most people with a serious understanding of the issues would find the three proposals completely unacceptable because they fail to recognise the true cause of the problem - it is the road itself that needs to be modified, not the waterway and surrounding environment. Council has failed to present this as one of the options. The waterway flows naturally to Narrabeen Lagoon and changing this flow to accommodate a road that was badly designed in the first place demonstrates poor analysis and lazy decision making. Of course the Parkway is a State road and council is responsible for surrounding bushland. This also appears to have clouded the process. Council should be telling RMS to get on with the job of reconstructing the road with appropriate bridges and levees so that this crucial road link between the peninsula and city never floods. The current proposals only offer to reduce flooding, not eliminate it. This is</p>

completely unacceptable. And there is another issue that needs to be urgently addressed in regard to the Parkway. It was designed and built in the 1940s and has not been upgraded. It is one lane in each direction for most of its length. Council should be showing leadership and, with the Beaches Link Tunnel soon to be a reality, demand State Government widen it to a 6 lane motorway to accommodate traffic from the Seaforth entry/exit point to Pittwater Road in North Narrabeen. It should include a flyover at the recently rebuilt Warringah Road intersection and a complete redesign of the road near the sections that currently flood. Council should be considering road capacity for the next 50 years, not letting State Government get away with patching up the existing totally inadequate, unsafe narrow road with its flood-prone sections. If this doesn't happen, motorists travelling to and from the city from the peninsula will be stuck in perpetual traffic chaos from the moment Beaches Link opens.

Sincerely

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