



Community Engagement Report  
Wakehurst Parkway Flood  
Mitigation (Stage 1)

October 2021

## Executive summary

The Wakehurst Parkway (the Parkway) is a major state-owned arterial road. The Parkway is subject to frequent flooding and subsequent closure. Council received \$5 million in grant funding, through the Stronger Communities Fund, to investigate options to address this frequent flooding. Through this grant program, Council completed a number of site investigations, detailed modelling and options assessment which resulted in a Flood Mitigation Feasibility Study.

The Flood Mitigation Feasibility Study, and the flood mitigation options it presented, was placed on public exhibition between 28 May 2021 and 19 July 2021. This Community Engagement Report (the Report), prepared in collaboration with Barbara Campany and Associates, outlines the findings from this exhibition.

### Key findings

A total of 512 responses were received during the public exhibition. Of these, 491 were received via Council's Your Say website and the remaining 21 were received via direct email or letter.

It was found that most respondents support flood mitigation works, but views diverged on the preferred method and the acceptability of the environmental impact.

#### **Most want better connectivity (around 76 percent)**

Most who responded wanted some form of solution, to either improve or completely fix flooding of the Parkway. Some wanted major infrastructure works to completely mitigate road closures (26 percent) whilst some considered a minor improvement to flooding suitable (10 percent considered a 1 in 1 year protection or less, option suitable). The most popular option for flood mitigation was the 1 in 2 year protection option, which received 40 percent of votes.

Although the preferred method and level of flood mitigation varied, many commented that flood mitigation was urgently needed.

#### **Most see environmental protection as a key issue, but more information and a deeper understanding of values and assumptions is needed (qualitative data)**

One of the key outcomes that emerged across all options was the value placed on protecting the environment. This was mentioned in many free text responses. Respondents are generally worried about the environmental impact of the options presented. While most want flood mitigation, respondents were very aware that any project along Middle Creek will impact the surrounding environment and many grappled with these competing values.

#### **Many want major infrastructure for permanent access (around 26 percent)**

Many responses suggested only more significant works were acceptable. It was often cited in these comments that what was suggested was a 'band-aid' approach and that a permanent solution was needed. It was identified that of those who wanted a larger infrastructure solution, some did so under the impression that it would be a more environmentally-friendly approach – which, as explained in Council's response later in the document, is unlikely to be the case.

### Options analysis

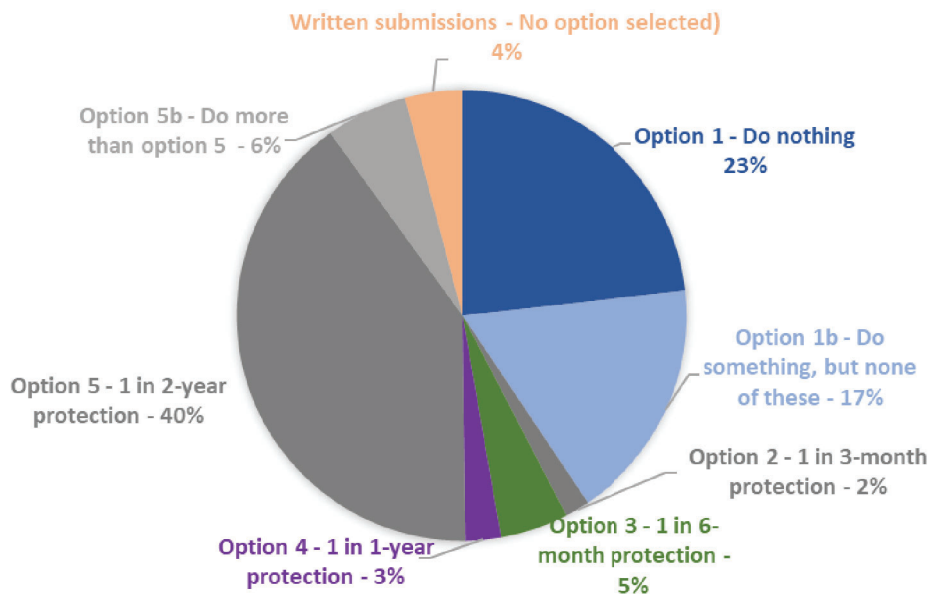
The Your Say website required that respondents choose one of the five options presented and elaborate on their decision by providing additional comments in a 'free text' comment box. The initial options provided were:

- **Option 1: Do Nothing**
- **Option 2: 1 in 3-month protection** (sediment removal at the Bends)
- **Option 3: 1 in 6-month protection** (sediment removal and new levee at the Bends; and culvert upgrades at Oxford Falls)
- **Option 4: 1 in 1-year protection** (sediment removal, new levee and culverts at the Bends; and culvert upgrades at Oxford Falls)
- **Option 5: 1 in 2-year protection** (sediment removal, new levee and culverts at the Bends; culvert upgrades at Oxford Falls; and bunds at the Sports Academy)

When analysing the free text it became clear that the option selected did not always present the respondent's actual preference. Many wanted more significant infrastructure (for permanent road access) but selected either Option 1 or Option 5. There were also several responses received by email or letter where an option wasn't specifically chosen. Therefore, to reflect the respondents preferences more accurately, we have included additional options and categorised them as:

- **Option 1 (b):** Do something but none of these
- **Option 5 (b):** Do more than option 5
- No option selected

The following figure illustrates the respondent preferences for all 8 options.



### Option 1: Do nothing - 23 percent

We found a direct correlation between those respondents who chose option 1 'Do Nothing' and corresponding statements that environmental impacts far outweighed the benefit of reducing road closures from six to seven events annually to one event every two years. This group also felt closures were acceptable as there were other ways to get to Frenchs Forest/Seaforth when flooding events occurred.



There may be scope for Council to undertake further analysis to enable some of the questions raised by this group to be answered in greater detail. There is a need to better understand and explain the environmental impacts, especially to this group.

#### **Option 1 (b): Do something, but none of these - 17 percent**

Many of those who selected option 1 felt compelled to do so as they stated the other options were inadequate, although they also indicated that some action was needed to reduce flooding or improve infrastructure. We have classified this group as option 1(b).

Those that chose this option generally indicated that they wanted infrastructure improvements such as raising the road or building bridges. Many of these respondents felt that improving the infrastructure would have less long-term environmental impacts.

#### **Option 2: 1 in 3-month protection – 2 percent**

Those who nominated option 2, 3 or 4 had provided quite detailed responses, suggesting that they had carefully considered the options presented.

Those who chose option 2 indicated the cost-benefit ratio did not justify the environmental impacts created from options 3, 4 and 5. Option 2 had the lowest environmental impact. Some also stated that the disruption caused by flooding was far less than what might be created by trying to fix the problem. This group felt that this option provided the best balance between flood mitigation and environmental impact/disruption.

If further development of an option could demonstrate greatly reduced impacts or stricter mitigation measures, this group may accept such an option, but this would have to be explored further.

#### **Option 3: 1 in 6-month protection - 5 percent**

Those that chose option 3 felt that this was the right balance – two closures a year being acceptable with better value for money. Most comments related to the importance of protecting the environment with some suggesting that any habitat lost at the expense of mitigation measures must be replaced.

There were also a number of comments relating to the sediment build up in Narrabeen lagoon and suggested that if this was better managed it may have a favourable impact on flooding (i.e. the flood waters across the road would abate sooner). Others suggested the culverts proposed at the Bends and Oxford Falls were too small.

#### **Option 4: 1 in 1-year protection – 3 percent**

Those that selected option 4 generally did so because they felt the expense of option 5 didn't resolve the flooding events entirely (i.e. still one flood event every 2 years). They stated that the cost to do option 5 for similar net benefit as option 4 was not justified. Also, a topographical map was suggested to help present the rationale behind the options. There was an overall shared view that some works needed to be done to improve the current circumstances.

#### **Option 5: 1 in 2-year protection - 40 percent**

There were 236 (46 percent) who selected option 5, however, like option 1, there was some division. Approximately 40 percent felt compelled to choose an option that would give immediate relief to the flooding. This group acknowledged the importance of getting something done now, and for Council to get on with it. They acknowledged the environmental impacts and were somewhat torn between the need to do some intervention and the impacts on the local bushland and waterways. However, they felt the road improvement benefits outweighed the environmental

impacts, and this also presented an opportunity to remove some of the noxious weeds at the same time.

### Option 5 (b): Preference for major infrastructure improvements - 6 percent

The remainder of respondents who chose option 5 stated more was needed to do major infrastructure upgrades along the Parkway and were frustrated that bridges, road raising and/or road widening hadn't been presented as potential options. Many shared the view that the options presented by Council only served to reduced flooding and did not eliminate it, which was unacceptable to them.

### Written response with no option selected - 4 percent

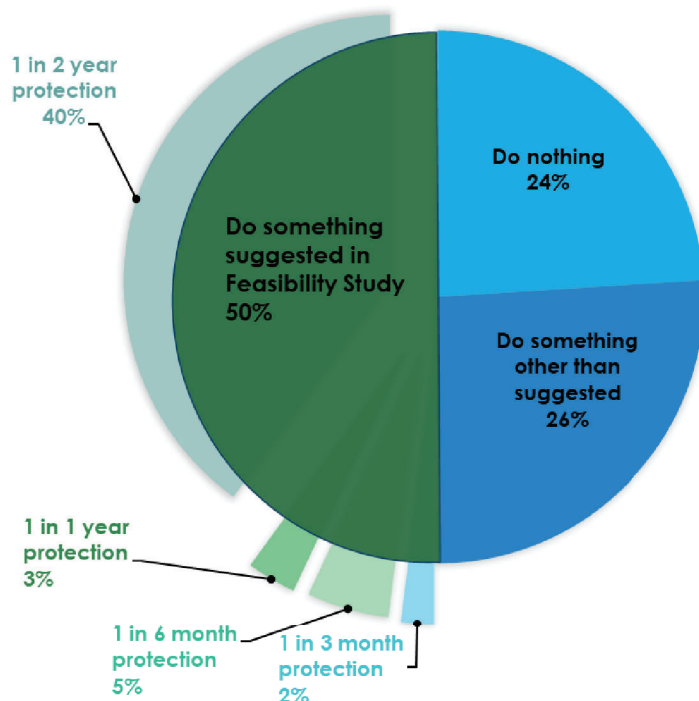
Of the 21 respondents who wrote directly to Council by passing the Your Say web page, 17 (just over 3 percent), conveyed that they felt a more permanent intervention was required, and that none of the formal options presented were adequate. The four remaining respondents were adamant that Council must protect the environment at all costs because the value of the habitat was too high to compromise. None of these 21 responses selected an option.

Most comments related specifically to the road infrastructure improvements needed and that funding such infrastructure should be a state government responsibility.

## Options Summary

The respondents option preference can be simplified into three main groups:

- Do nothing
- Do something other than suggested (not an option presented in the Feasibility Study)
- Do something suggested in the Feasibility Study



**Do nothing - 24 percent**

24 percent chose "Do-Nothing". This is the 23 percent who specifically chose Option 1 Do Nothing, plus the four respondents (1 percent) who inferred do nothing in their written response (without selecting an option). Do nothing was chosen because they care very much about the environment and are concerned that impacts of any flood mitigation measures may have irreversible and unacceptable impact.

We could assume that this is a fixed view and unlikely to change but if, for example, Council could demonstrate a way to reduce environmental damage then they may possibly be more prepared to tolerate the project in some form.

**Do something other than suggested (implying major infrastructure upgrades) - 26 percent**

26 percent (sourced from option 1b, option 5b and written responses) of respondents wanted options that provide permanent access along the Parkway and none of the options presented in the study provided this. It is not known whether there is any appetite for a compromise from this group for option 5, particularly if this group can acknowledge that significant road upgrades are unlikely.

Given the number of responses from this group (sourced from option 1b, option 5b and no option), Council will need to engage with this group to:

- provide greater explanation around the significant environmental impact caused by the footprint of major infrastructure projects (that is, impacts will be much greater than the options presented in the feasibility study).
- explain that major road upgrades are unlikely
- identify the level of support for a more achievable solution, and if so, what would that look like to them (that is, perhaps option 5 or a future new version may appeal).

**Do something suggested (options 2,3,4 and 5) - 50 percent**

50 percent of the respondents wanted one of the suggested options for flood mitigation works. Respondents in this group considered flood mitigation works were needed, and those who chose option 5, felt they were needed urgently.

**Next Steps**

With over 70 percent of respondents wanting some form of flood mitigation, Council should consider further analysis to create stronger consensus on a preferred option. This should include a robust engagement process that can address the key issues raised by the study, providing an opportunity for the community to be heard, and an opportunity to acknowledge others' views.

## Table of Contents

1	Introduction.....	1
2	Engagement .....	2
2.1	Approach .....	2
2.2	How we engaged – channels and statistics summary.....	4
2.3	Who responded .....	5
2.4	Engagement purpose and objectives .....	5
3	Data analysis approach .....	8
3.1	How the data has been analysed .....	8
3.2	Emerging themes .....	8
4	Findings .....	9
4.1	Options analysis – general discussion .....	9
4.1.1	Option 1: Do nothing – general discussion.....	10
4.1.2	Option 2: 1 in 3-month protection - 2 percent .....	13
4.1.3	Option 3: 1 in 6-month protection – 5 percent .....	14
4.1.4	Option 4: 1 in 1-year protection – 3 percent .....	15
4.1.5	Option 5: 1 in 2-year protection – general discussion .....	16
4.1.6	No formal option selected (majority of written responses) – 4 percent.....	18
4.2	Responses by themes - discussion.....	20
4.2.1	Flooding – general discussion .....	20
4.2.2	Environment – general discussion.....	29
4.2.3	Funding.....	39
4.2.4	Other state government issues.....	41
4.2.5	Climate change issues .....	43
4.2.6	More information about options requested .....	45
4.2.7	Cultural heritage .....	47
4.2.8	Social and economic issues .....	49
4.2.9	Miscellaneous .....	51
5	Conclusions .....	53
	Appendix A Verbatim community and stakeholder responses.....	56
	Appendix B – RAW DATA.....	138

## Figures List

Figure 1: Options Comparison Table.....	3
Figure 2: Do Nothing - Option 1 split.....	11
Figure 3: Option 1 - Do nothing – number of comments by theme .....	12
Figure 4: Option 1b comments by theme.....	13
Figure 5: Option 2: 1 in 3-month protection - number of comments by theme.....	14
Figure 6: Option 3: 1 in 6-month protection – number of comments by theme.....	15
Figure 7: Option 4: 1 in 1- year protection – number of comments by theme.....	15
Figure 8: Option 5: 1 in 2-year protection - number of comments by theme.....	17
Figure 9: Option 5b: comments by theme.....	18
Figure 10: No option selected - comments by themes.....	19
Figure 11: Flooding - comments by option.....	20
Figure 12: Flooding theme 1 - state-owned infrastructure - comments by option.....	21
Figure 13: Flooding theme 2 - options provided are not the right solution - comments by option ...	23
Figure 14: Access to Northern Beaches Hospital - comments by option.....	25
Figure 15: Flooding theme 4 - closures acceptable - comments by option.....	27
Figure 16: Environment – comments by option .....	29
Figure 17: Environment theme 1 - sedimentation - comments by option.....	30
Figure 18: Environment theme 2 - biodiversity - comments by option.....	32
Figure 19: Environment theme 3 – protecting the environment - comments by option.....	35
Figure 20: Environment theme 4 - contamination - comments by option.....	37
Figure 21: Funding issues: comments by option .....	39
Figure 22: Other state government issues: comments by option.....	41
Figure 23: Climate change: comments by option.....	43
Figure 24: More information about options: comments by option .....	45
Figure 25: Cultural heritage: comments by option .....	47
Figure 26: Social and economic issues: comments by option .....	49
Figure 27: Miscellaneous comments by option.....	51
Figure 28 Option Preference .....	54

## Tables List

Table 1: Engagement purpose and outcomes.....	5
Table 2: Engagement objectives and outcomes .....	6
Table 3: Flooding them 1 – state-owned infrastructure.....	22
Table 4: Flooding theme 2 - options provided are not the right solution .....	24
Table 5: Flooding theme 3 - access to Northern Beaches Hospital.....	26
Table 6: Flooding theme 4 - closures acceptable - comments by option.....	28
Table 7: Environment theme 1 – sedimentation issues raised and Council response.....	31
Table 8: Environment theme 2 - biodiversity.....	33
Table 9: Environment theme 3 - protecting the environment.....	36
Table 10: Environment theme 4 - contamination .....	38
Table 11: Funding .....	40
Table 12: Other state government issues.....	42
Table 13: Climate change issues.....	44
Table 14: More information about options requested .....	46
Table 15: Cultural heritage .....	48
Table 16: Social and economic Issues .....	50
Table 17: Miscellaneous .....	52
Table 18: Flooding – state owned Infrastructure issues - verbatim comments.....	56
Table 19: Flooding - options presented not the right solution - verbatim comments .....	68
Table 20: Flooding - access to Northern Beaches Hospital - verbatim comments .....	83



Table 21: Flooding - closures acceptable - verbatim comments.....	91
Table 22: Environment - sedimentation - verbatim comments.....	94
Table 23: Environment - biodiversity verbatim comments .....	96
Table 24: Environment - protection - verbatim comments .....	109
Table 25: Environment - contamination - verbatim comments.....	115
Table 26: Funding - verbatim comments .....	118
Table 27: Other Government Issues - verbatim comments .....	121
Table 28: Climate change - verbatim comments .....	122
Table 29: More information about options needed - verbatim comments.....	125
Table 30: Cultural heritage - verbatim comments .....	127
Table 31: Social and economic - verbatim comments .....	128
Table 32: Miscellaneous - verbatim comments.....	135

## 1 Introduction

The Parkway is a major state-owned arterial road connecting several northern beaches suburbs including Narrabeen, Oxford Falls, Frenchs Forest and North Balgowlah. It passes through a sensitive, rich ecosystem supporting an array of threatened plants and animal species. The road is prone to flooding during rain events in certain areas, and as a result, road closures are frequently experienced on average six to seven times a year.

The community has voiced concerns related to the flooding and subsequent closure for many years both to Council and Transport for NSW (TfNSW). These concerns have amplified since the opening of the new Northern Beaches Hospital with issues cited by some community members and community groups around access to the main Northern Beaches hospital.

Council received \$5m from Stronger Communities funding in April 2019 to undertake a feasibility study to address flooding on The Parkway. The Feasibility Study presented a range of options to reduce frequent flooding. However, these options result in significant environmental impacts.

Transport for New South Wales (TfNSW) has agreed to provide an additional \$13.1m (2020) for Council to implement a feasible option, should Council decide to proceed.

In March 2021, Council endorsed to publicly exhibit options following the feasibility study. This was required to test sentiment with the community before proceeding with the next steps of the project.

This Community Engagement Report has been prepared in Collaboration with Campany and Associates. It outlines the findings from the public exhibition of the feasibility study.

## 2 Engagement

### 2.1 Approach

The community and stakeholder engagement was planned, implemented and reported in accordance with the Northern Beaches [Community Engagement Matrix](#) (2017).

A project page was established on Council's have your say platform with information provided in an accessible and easy to read format.

The information presented included the project background and the narrative on how the draft feasibility study determined the four (4) feasible flood mitigation options (refer to Figure 2), and also included a 'Do Nothing' option which inferred that no major infrastructure would be constructed to mitigate the large-scale flood events.

Feedback was captured through an online response form which contained a mandatory question to gather a preference of the identified options.











An open-field comments box was also available to encourage respondents to elaborate on their responses to assist identify specific issues, constraints and/or other unidentified opportunities. In particular, whether the community felt that the benefits of flood protection outweighed the projected environmental risks.

Email and written comments were also invited. Contact details for the project manager were provided.

The public exhibition was primarily promoted through resident and stakeholder notifications, letter box drops, signage, social media and including into Council's e-newsletters.

Engagement with the community and stakeholders included both face to face and online meetings, to provide an opportunity for the community to ask questions of project staff and subject matter experts. Signs along the Parkway and its surrounds, including variable message signs (VMS) were used to promote both the project and sessions. Figure 1 illustrates the options and the relative flood protection provided by each.







Figure 1: Options Comparison Table

	Option 1 Do nothing	Option 2 1-in-3-month protection	Option 3 1-in-6-month protection	Option 4 1-in-1-year protection	Option 5 1-in-2-year protection (identified as the most effective flood protection outcome)
Measures adopted	No options adopted - maintain the current operational practices with monitoring and closure improvements.	B5	B2 + O1	B3 + O1	B4 + O2 + S1
	No constructed measures, improvements to flood monitoring.	Removal of overbank sediment immediately upstream of the Bends.	Upgrade existing culverts (m)  New Levee and removal of 1m depth of sediment im- mediately upstream of the Bends.	Upgrade existing culverts (m).  New levee, removal of 1m depth of overbank sediment and two sets of new under-road culverts.	Significantly increase existing culverts at Oxford Falls.  New levee and removal of 1m depth of overbank sedi- ment and two sets of new under-road culverts, and existing levee top up.  Bunds and localised low point drainage if needed at the Academy.
Average closures per year	Six to seven closures on average per year	At least four closures on average per year	At least two closures on average per year	At least one closure on average per year	At least one closure on average every two years  Eight (8) times as effective as 1-in-3-month protection  Twice as effective as 1-in-1-year protection
Cost (indicative only), \$M	\$0.05M	\$4.5M 	\$7.0M  	\$13.3M   	\$17.5M    

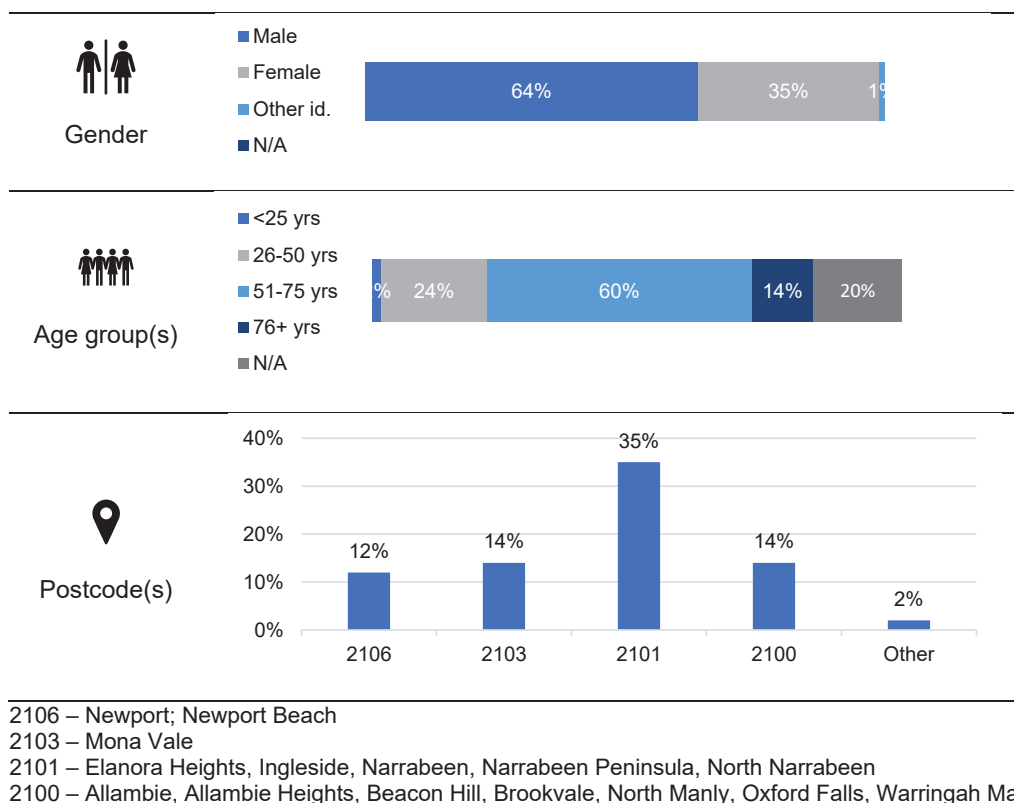
	Option 1 Do nothing	Option 2 1-in-3-month protection	Option 3 1-in-6-month protection	Option 4 1-in-1-year protection	Option 5 1-in-2-year protection (identified as the most effective flood protection)
Likely environmental impacts	No environmental impacts as no works would occur.	Vegetation cleared (local + native) ~ 27,360m <sup>2</sup> .	Vegetation cleared (local + native) ~ 29,700 m <sup>2</sup> .  Two plant community types impacted are classified threatened ecological communities - Swamp Sclerophyll Forest, and Freshwater Wetlands.	Vegetation cleared (local + native) ~ 32,250 m <sup>2</sup> .  Three plant community types impacted are classified threatened ecological communities - Swamp Sclerophyll Forest, Freshwater Wetlands, and Swamp Oak Floodplain forests.	Vegetation cleared (local + native) ~ 34,700m <sup>2</sup> .  Four plant community types impacted are classified threatened ecological communities - Swamp Sclerophyll Forest, Freshwater Wetlands, Swamp Oak Floodplain forests, and Coastal Saltmarsh.
		Sediment removal (25,600m <sup>3</sup> ) could impact aquatic habitats.			
Delivery / Construction		25+ weeks to complete.  Significant truck movements for overbank sediment removal.	30+ weeks to complete.  Temporary road closures needed for culvert works. Could be partial in nature.  Significant truck movements for overbank sediment removal.	40+ weeks to complete.  Temporary road closures needed for culvert works. Could be partial in nature.  Significant truck movements for overbank sediment removal.	40+ weeks to complete.  Temporary road closures needed for culvert works. Could be partial in nature.  Significant truck movements for overbank sediment removal.
Delivery / Construction		Significant truck movements for overbank sediment removal.	Temporary road closures needed for culvert works. Could be partial in nature.  Significant truck movements for overbank sediment removal.		



## 2.2 How we engaged – channels and statistics summary

	Visitors: 6,013	Visits: 7,661	Av. time onsite: 4mins 10 sec
Have Your Say			
	Post: 1		Reach: 21,827 Likes, comments and shares 122 Clicks: 2431
Social media			
	Letter drop: Narrabeen area		Distribution: 95
Print media and collateral	Site signs: Yes		Number: 15
	VMS Board Yes		Number: 2
	Community Engagement (fortnightly) newsletter: 3 editions		Distribution: 24,000 subscribers
Electronic direct mail (EDM)	Council (weekly) e-News: 3 editions		Distribution: 150,000 subscribers
	Face to Face information session: 2 sessions held		F2F attendance: 35 people across all sessions
Face-to-face sessions	Online information session : 2 sessions held		Online attendance: 21 people across all sessions
	Presentations:		Attendance: 3
Key stakeholder engagement	Stakeholder emails:		Distribution: 27
	Community emails:		Distribution: 69

## 2.3 Who responded<sup>1</sup>



## 2.4 Engagement purpose and objectives

Council established three (3) purpose statements for engagement and a number of key engagement objectives to guide the engagement process.

An outline of suggested tools to help assist meeting the purpose statements and objectives of the engagement program were also developed. These are presented in Tables 1 and 2 below.

Table 1: Engagement purpose and outcomes

Engagement purpose	How were purpose statements met?
1) Provide the community with opportunities to give feedback prior to a decision being made.	Over 500 responses were made via the your say portal. Subject matter experts to assist with explaining concepts attended the two on-line forums and the two community face to face drop-in sessions. The information given through the responses will influence Council's next steps.

<sup>1</sup> Demographic data was gathered by request only. The data represented only includes those respondents who provided this detail.

2) Identify community and stakeholder support or non-support for the options and understand the relevant concerns, local knowledge, and values.	Consultation outcomes will directly inform the report to Council for the next steps in decision making. The findings of this consultation process are described in this report and identify the community sentiment and issues raised.
3) Provide Councillors with accurate representation of community sentiment to allow them to make an informed decision on next steps.	Specific sentiment question on five options including a 'do nothing' option and analysis of qualitative feedback are presented in this report. The appendix captures all 'verbatim' comments from responses. The main body of this report also reflects the common themes/issues that emerged through the consultation providing Council with information to guide the next steps. Council's responses to the general themes raised are also included.

Table 2: Engagement objectives and outcomes

Engagement objectives	How were objectives met?
1) Build community and stakeholder awareness of participation activities (inform)	The tools used to inform the community and stakeholders included signage with QR codes linking to the Your Say page letterbox drop, social media post, website, EDMs and through the media to advise the community about the opportunity to make a response. Phone calls were also made to key stakeholders, and targeted emails were sent to key interest groups and local community associations/schools. The response of more than 500 responses suggests that community was aware of the opportunity to participate in engagement activities including on-line forums and face to face information sessions.
2) Provide accessible information so community and stakeholders can participate in a meaningful way (inform)	The project information, while technical, was made as accessible as possible with summarised documents, graphic breakdowns of the data, easy to ready comparison tables and meaningful FAQs.
3) Provide balanced and objective information to assist in understanding the problem, alternatives and/or solutions	As part of the consultation process, Council provided links to the completed feasibility study (parts 1 and 2) together with a number of other reference documents (key drivers of flooding) on the your say page. Council also provided the context and a summary of the issues to assist with easier interpretation of the technical material. Summaries included the Options detailed, The Parkway, Options refinement and Next Steps. The community and stakeholders were able to review these documents online.
4) Facilitate inclusive and ongoing dialogue using context appropriate spaces	Council facilitated two drop-in sessions and two on-line forums for face-to-face interaction designed to assist by presenting the material on the you say site verbally and if

Engagement objectives	How were objectives met?
and platforms (consult- involve)	required clarifying specific matters being raised by community and stakeholders. Community and stakeholders had access to Council's project team and subject matter experts during these sessions to assist with questions/comments.
5) Recognise, manage, and communicate the needs and interests of community and stakeholders, including decision makers (consult- involve)	Council encouraged individuals and groups to make responses to ensure their concerns could be captured and considered as part of the process going forward.
6) Communicate to community and stakeholders how their input was incorporated into the planning and decision-making process (inform)	This Community Engagement Report will be published on the Council website within three months of the closure of comments. The Council electronic newsletter will promote this at the time of publication, as well as an email (EDM) sent to all respondents that indicated that they would like to be kept informed of next steps.
7) Endeavour to ensure our engagement considers all affected audiences.	Council provided several opportunities for stakeholder groups and community to participate in the discussion (summarised in Section 2.2). The responses provided to Council will help guide the next steps regarding flood mitigation option selection. The findings will also help to inform further consultation that will be required if the feedback received is not considered to be representative of the population as a whole.



### 3 Data analysis approach

#### 3.1 How the data has been analysed

The 512 responses have each been assigned a number. All identifying information in each comment has been removed.

The option preference of each was then allocated (if one was provided), and the data attached to the response was categorised within the emerging themes/issues articulated in the comments made. So, if for example, several comments about various aspects of the project were expressed in one response, each comment was allocated to the specific theme so that Council could identify sentiment attached to specific issues.

Numerous issues were identified throughout the responses. To allow further analysis, the issues have been grouped within the themes below.

#### 3.2 Emerging themes

The feedback was reviewed and analysed, and categorised within the following themes:

1. **Flooding** – issues relating directly to flooding impacts on access of the Parkway
  - 1.1 Flooding – state owned infrastructure matters (TfNSW)  
(e.g. building bridges, raising road – any and all suggested road works)
  - 1.2 Flooding - options presented not right solution
  - 1.3 Flooding - access to Northern Beaches Hospital
  - 1.4 Flooding - closures acceptable
2. **Environment** – issues relating to biodiversity, bushland and waterways adjacent to the Parkway
  - 2.1 Environment - sedimentation
  - 2.2 Environment - biodiversity
  - 2.3 Environment - protecting the environment
  - 2.4 Environment - contamination
3. **Funding** – issues raised regarding the general project funding
4. **Other state government issues** – issues that do not fall within the Council remit of this project and belong to the state government
5. **Climate change** – issues relating to project impacts on climate change
6. **More information required** about options – where people are seeking more information
7. **Cultural and European heritage** issues – matters relating to Indigenous issues as well as European heritage issues
8. **Social and economic** issues – matters pertaining to community and its interface with the Parkway
9. **Miscellaneous** – general comments that don't fit within a specific theme.

Most of the specific comments made have been allocated to themes. The verbatim comments have been captured in Appendix A at page 56. The comprehensive responses are attached in Appendix B. Response numbers have been assigned and those who made responses will be able to refer to this number throughout the analysis. While some comments overlap (i.e. they could fit within more than one theme), the intent of allocating comments to themes is to identify the common emerging issues so that Council can respond to those specific issues. It will also help to identify key community concerns and guide future engagement on the project.

## 4 Findings

### 4.1 Options analysis – general discussion

The options presented in the feasibility study raised many issues. There were three major outcomes revealed in the findings:

#### 1. Most want connectivity

The feedback reflects that most people want a solution that fixes the flooding issues either permanently, or for the longest possible/available option permitted.

Analysis of the various options verified some divide between those requesting a 'do nothing' approach and the majority who support the option package that will yield the highest flood protection.

What was acceptable to some though, was unacceptable to others. For example, the responses for both option 1 (Do Nothing) and option 5 (the most comprehensive flood protection measure) attracted the most support – but they were polarising, with appeal from the option 1 community to '*please do nothing*' (as this will destroy our pristine parklands) to the other end of the spectrum where option 5 comments indicated '*please do everything you can to fix this*' (as it is critical to maintain access).

#### 2. Many want major infrastructure for permanent access

We know that Council's have your say page required participants to choose an option if they wanted to register their comments, and some chose options reluctantly. The majority of people who expressed their reluctance in the comments, described those options presented as being inadequate to address the flood mitigation problem – they wanted a more permanent intervention.

Many commented that a permanent solution would avoid the 'band-aid' approach, which was suggested to be a waste of ratepayers' money. *Do something and do it right the first time* emerged a number of times in responses further expressing that the Parkway needs a major upgrade to fix the flooding events permanently.

Those that felt strongly that more should be done had included lengthy and detailed responses as to why permanent access was important. Some responses suggested that the proposed Beaches Link Tunnel at Seaforth is likely to have a major impact on future traffic numbers to Narrabeen and north via the Parkway. This correlates directly with the view expressed in many of the responses that there is a much greater need to address the Parkway as a major arterial road, even though this responsibility does not sit with Council, but with the state government as the asset owner. The findings didn't tell us that if infrastructure improvements were not an option (i.e. there were no future plans for upgrading of the Parkway by the state government), whether this group would be willing to compromise on a solution and for Council to take some measures to do flood protection.

#### 3. Most see environmental protection as a key issue, but more information and a need for a deeper understanding of values and assumptions is needed

One of the key outcomes that emerged within all options was the value placed on the importance of protecting the environment. People are generally worried about the potential damage to the environment, as well as the costs involved to deliver effective flood mitigation measures.

While many want to move ahead with the highest flood protection possible, people are aware that any project along the road embankments will impact the surrounding environment and many grappled with these competing values. Is some environmental impact worth the convenience of permanent access? Some thought not. Others felt that this was critical, and Council needed to find a way. The study was not conclusive on this issue but does indicate that Council would need to carefully consider a robust and sustainable approach to ensure whatever option is eventually chosen (if any), that environmental impacts are better understood by both Council and the community. Mitigation and management protection measures must remain a priority. The key question is how can flood mitigation measures and the associated works needed to achieve them be compatible with environmental protection?

Some suggested a rehabilitation program offering improved environmental outcomes for the area would help to offset the impacts. This might include the removal of introduced/exotic species and noxious weeds for example, and/or removing the existing contaminants in the sediments. While this might seem like an ideal outcome, others were worried that if you disturb these existing environments, damage could be irreparable. Further studies on understanding contaminants in the sediments would be key, prior to any final decision that might be made in the future.

There was also evidence to suggest that with more detailed breakdown of costs, impacts and the ability to demonstrate the effectiveness of options, some may change their mind on their option preference. If Council decides to move forward, given that most people want improved connectivity during flood events, (and apart from further technical and environmental assessment) deeper engagement is required to counter misplaced assumptions, and identify whether a preferred final option might emerge.

Generally, across the board though, whether they wanted Council to do something or not, protecting the environment remained a concern for many.

The following sections provide a breakdown of the findings for each of the options selected.

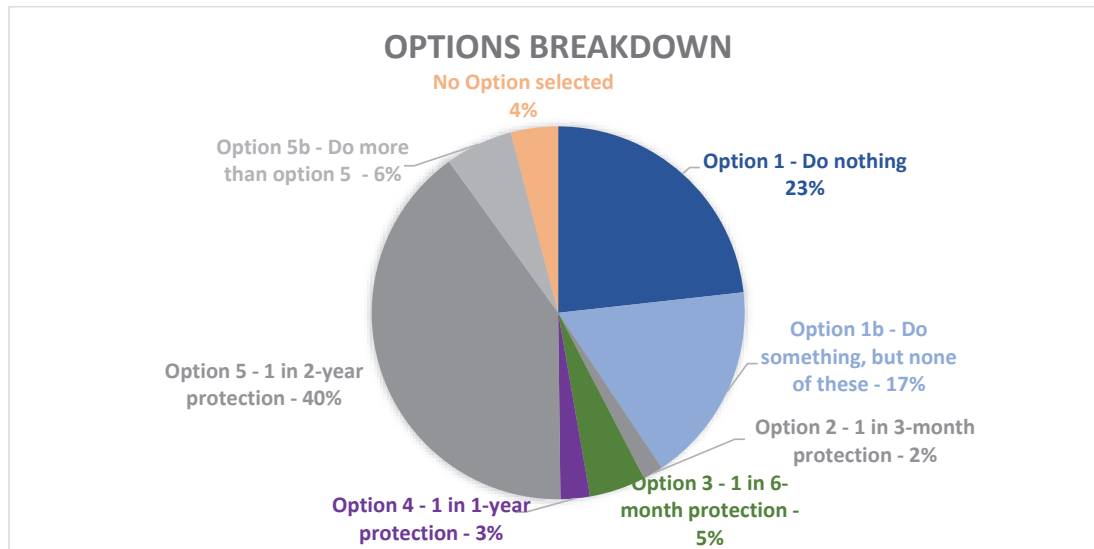
#### **4.1.1 Option 1: Do nothing – general discussion**

Forty percent of the responses chose *option 1 do nothing*. Many of those who chose this however, felt compelled to do so as they stated the other options were inadequate, and indicated in their comments that some action was needed to reduce flooding or improved infrastructure, but not in line with those presented.

So we have split this group into *option 1 do nothing*, and *option 1b do something but none of these*. As a result, the preference to *Do nothing* more accurately sits at around 23 percent (not at 40 percent), and option 1b – *Do something but none of these* sits at 17 percent. We have discussed option 1 further according to these underlying preferences.

This breakdown of option 1 and option 1b is presented in Figure 2.

Figure 2: Do Nothing - Option 1 split



#### 4.1.1.1 Option 1: Do nothing - 23 percent

We found a direct correlation between those respondents who chose *option 1 Do Nothing* (118) and corresponding statements that environmental impacts far outweighed the benefit of reducing road closures from six-seven events annually to one event every two years. From all of the responses received, this group placed the highest value on biodiversity and the environment compared with the others. They stated that the inconvenience of the low number of flooding events does not justify disturbing the parklands adjacent to the Parkway because there are two other access roads to the Northern Beaches Hospital.

Example comments from option 1 reflecting that Council should not change anything:

*Being unable to access a road 5-7 times a year is hardly a disaster; especially as there are other roads off the peninsula.*

*I thoroughly disagree with any possible degradation of the beautiful bush land and riparian environments surrounding the Wakehurst Parkway.*

There was no indication to suggest that developing options that have reduced impacts or putting in place stricter mitigation measures would provide solace to these respondents. However, there were comments that erred on the side of caution because there wasn't enough evidence to suggest that the ecology could recover.

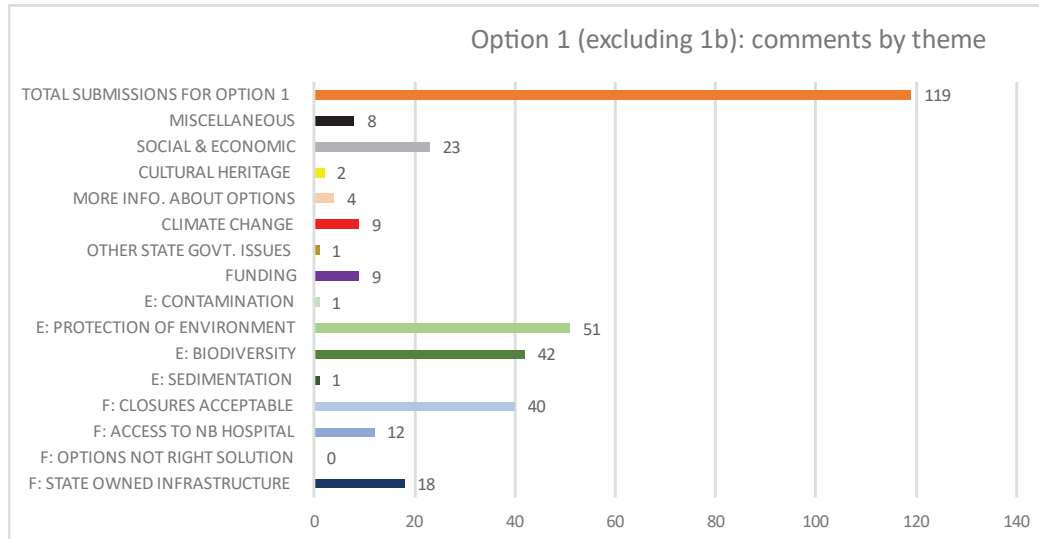
*People and families have been using the area for recreation and exercise for a while and we are not sure how that would change the character of the area and even whether the ecology would recover after*

There may be scope for Council to undertake further studies to enable some of these questions to be answered in greater detail.

Of the 119 respondents who selected option 1 the issues of most concern related to flooding and environmental impacts. See Figure 3: Option 1 - Do nothing – number of comments by theme.



Figure 3: Option 1 - Do nothing – number of comments by theme



#### 4.1.1.2 Option 1 (b): Do something, but none of these - 17 percent

The data indicates that 17 percent (or 89 responses) of those who chose the *Do nothing* option, actually want some solution to reduce flooding through improved infrastructure. We have classified this group as *option 1(b) - do something but none of these*.

These respondents felt the other options presented in the study to mitigate flooding along the Parkway were inadequate. A common solution provided was raising sections of road and providing bridges to allow fauna to travel beneath, and not interfere with the environment. These responses *may not* have considered the actual environmental impacts from any construction associated with raising the road or building bridges.

Example comments to support this assumption:

*"It is not the surrounding area that needs to be modified it is the 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)."*

*"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."*

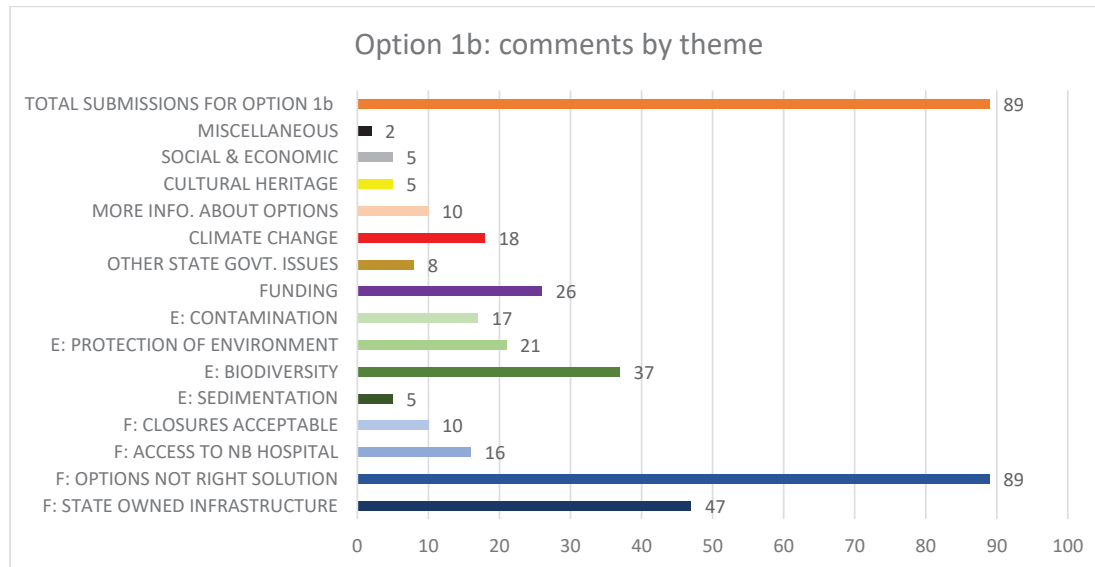
The strongest theme emerging from option 1b responses (89) was to raise the road above the flood zones to address flood measures on the road itself. Many felt that the options presented were a 'band-aid' solution and were frustrated that Council had not presented an option to raise the road or build bridges to address the flooding more permanently. Others felt that the road was the responsibility of the state government not Council, and that it would eventually be widened and suggesting that undertaking invasive road improvements twice (once by Council through this project, and then by the state government) would unnecessarily disturb the environment more than needed.

Example comment from option 1b reflecting that it's a state government responsibility

*“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.”*

The findings also indicate that there is a shared view that by raising the road, fauna can move about freely beneath it. There was little indication that the respondents were aware that such a major infrastructure upgrade would itself create much greater impact to the environment than the options proposed by Council. See Figure 4: Option 1b comments by theme.

Figure 4: Option 1b comments by theme



#### 4.1.2 Option 2: 1 in 3-month protection - 2 percent

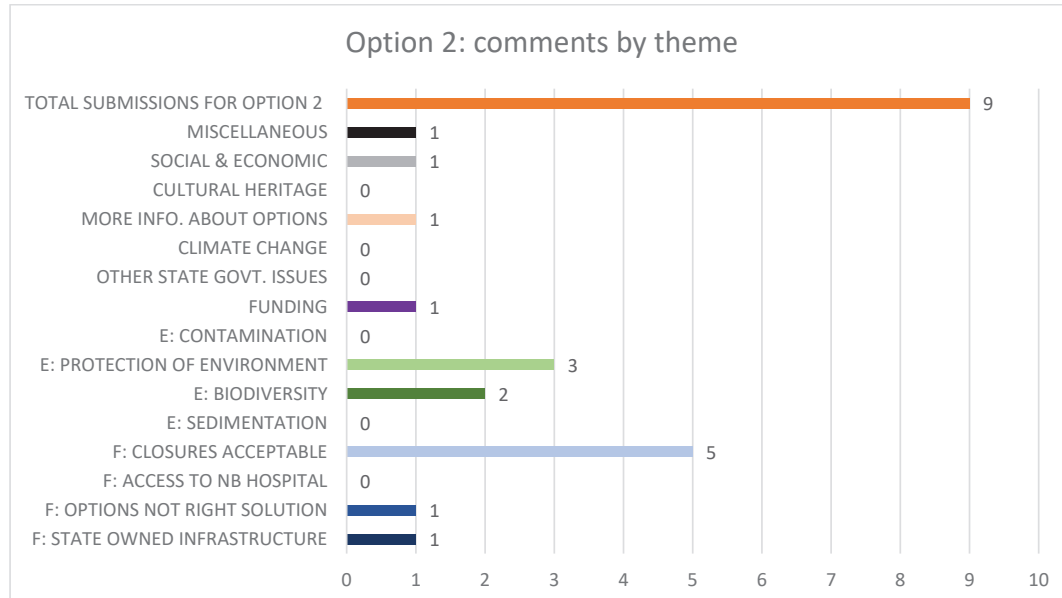
There were nine (9) responses nominating option 2 as their preference, representing 2 percent of the total responses.

Those who selected option 2 also indicated that they were not all fully satisfied with the solutions proposed. This group was generally more considered and often reflected more deeply on their rationale. They were mostly concerned about environmental protection and thought minor improvements were enough.

Figure 5 illustrates the comments made by theme. Five (5) of these responses felt that four closures a year was acceptable. One detailed response described why the other options were not suitable, primarily due to the impact on the environment. One commented that the length of time to re-open the road after a flooding event could be improved.

*One of the key issues of concern to the community is the timely reopening of the Parkway after flooding. It seems to take many hours after the flooding has abated. It would be appropriate if the Council and the NSW Government reviewed the current arrangements to ensure it is re-opened in a timelier manner.*

Figure 5: Option 2: 1 in 3-month protection - number of comments by theme



This group recognised that something needed to be done, but the very minimum to ensure that the environment value is not lost. If further development of an option could demonstrate greatly reduced impacts or stricter mitigation measures, this group may accept such an option, but this would have to be explored further.

#### 4.1.3 Option 3: 1 in 6-month protection – 5 percent

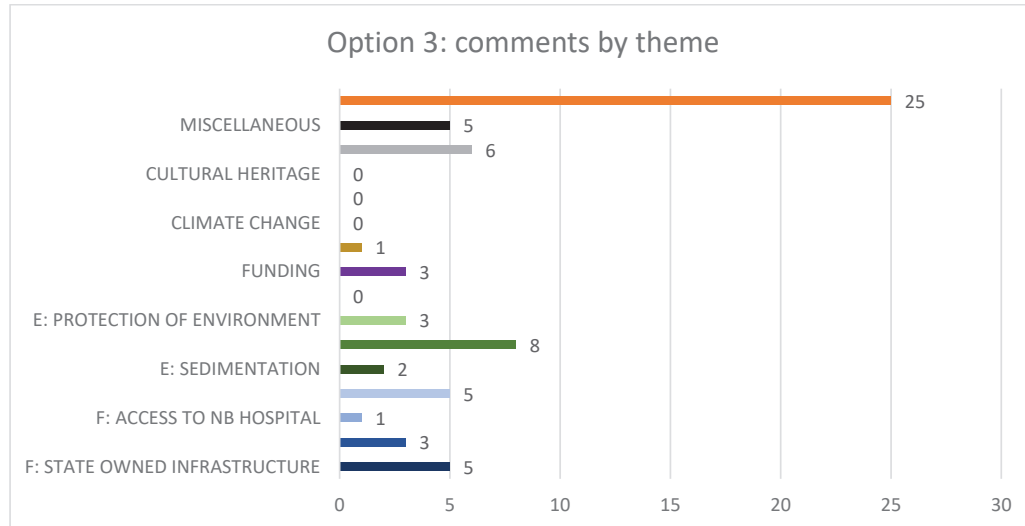
Five (5) percent of the responses (25) favoured option 3, suggesting that two (2) closures a year were acceptable to the community. Their responses were considered and detailed. Those who chose option 3 also indicated that they did not think option 5 was necessary. Most thought that option 3 was a good compromise between option 1 and option 5.

Figure 6 illustrates the themes that emerged in the option 3 responses. Many of the responses spoke favourably about this option because of the cost benefit ratio – for a lot less money spent, you would have up to two (2) closures per year. These responses generally felt that even option 5 didn't guarantee that there would be no closures so why spend the extra money. Environmental concerns were also expressed – that minimum impact on the environment was critical and suggested that option 3 achieved this. Another comment suggested that the Parkway would be upgraded eventually, and it would be preferable to see the money spent on a major roadwork plan. The two quotes below reflect the general view of those that selected option 3.

*If this option is \$10m cheaper (than option 5) and there is only one extra closure per year - save the money.*

*In the not too distant futures, the 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.*

Figure 6: Option 3: 1 in 6-month protection – number of comments by theme

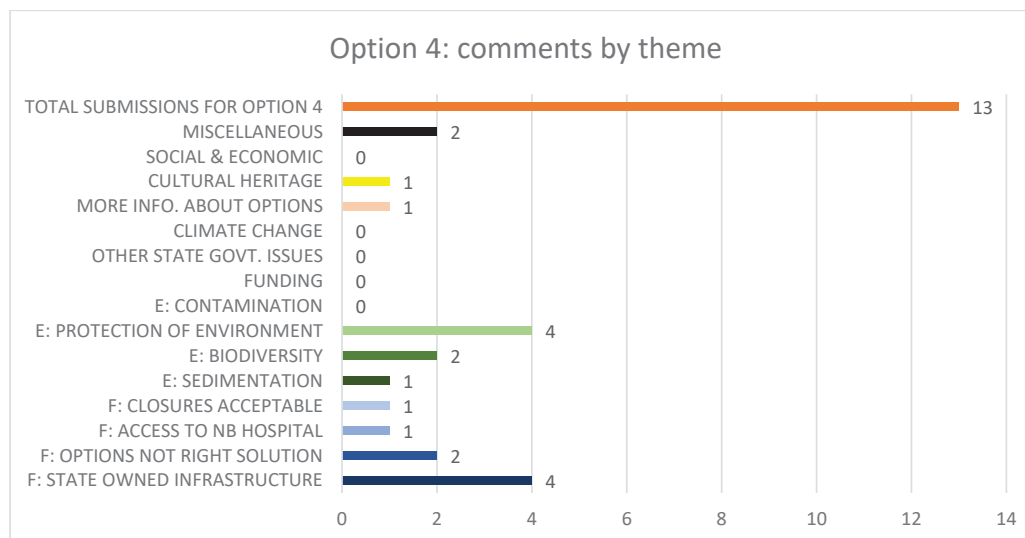


This group recognised that something needed to be done, but not at the cost of option 5. The findings did show that those who chose this option, most were concerned about the importance of biodiversity and protecting the environment, but the findings were not conclusive to show they understood the environmental impacts between option 3 and option 5 as being almost the same, so perhaps one assumption to draw is that their choice was primarily based on the cost benefit and not the environmental impacts or the inconvenience of a couple of closures per year.

#### 4.1.4 Option 4: 1 in 1-year protection – 3 percent

Option 4 was selected by 13 people ( around 3 percent of all respondents). Those who chose this option indicated that the extra \$4m to deliver option 5 was not warranted as it did not provide permanent access – there would still be road closures. Figure 7 illustrates the spread of comments across the themes

Figure 7: Option 4: 1 in 1- year protection – number of comments by theme





Comments from those who chose this option varied, and no substantial trends were identified. Similarly to option 3, some comments referred to the savings made compared with option 5, as option 5 increased environmental impact and only gained one extra closure per annum. Three responses referred to raising or elevating the road. Concerns about environmental impact were also expressed, particularly the need to minimise impacts on trees, wetlands and wildlife. Cultural heritage was also raised in one of the responses.

*A reduction of 1 closure in two years for Option 5 is not worth \$4 million and increased environmental impact.*

*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?*

*Endure protection of aboriginal sites.*

This group recognised that something needed to be done, but not to the extent of option 5 because of the extra cost and limited extra benefit.

#### 4.1.5 Option 5: 1 in 2-year protection – general discussion

There were 236 (46 percent) preferences for option 5, however, like option 1, there was some division. Approximately 40 percent felt compelled to choose an option that would give immediate relief to the flooding. This group acknowledged the importance of getting something done now, and for Council to get on with it. They acknowledged the environmental impacts and were somewhat torn between the need to do some intervention and the impacts on the local bushland and waterways. However, they felt the road improvement benefits outweighed the environmental impacts, and this also presented an opportunity to remove some of the noxious weeds at the same time.

The remainder of respondents who chose option 5 stated more was needed to do major infrastructure upgrades along the Parkway and were frustrated that bridges, road raising and/or road widening hadn't been presented as potential options. Many shared the view that the options presented by Council only served to reduced flooding and did not eliminate it, which was unacceptable to them.

So we have split this group into *option 5: 1 in 2-year protection* and *option 5b: Major infrastructure improvement*. As a result, the preferences for *option 5: 1 in 2-year protection* more accurately sits at around 40 percent, and *option 5b: Major infrastructure improvement* – sits at 6 percent. We have discussed option 5 below according to these underlying preferences.

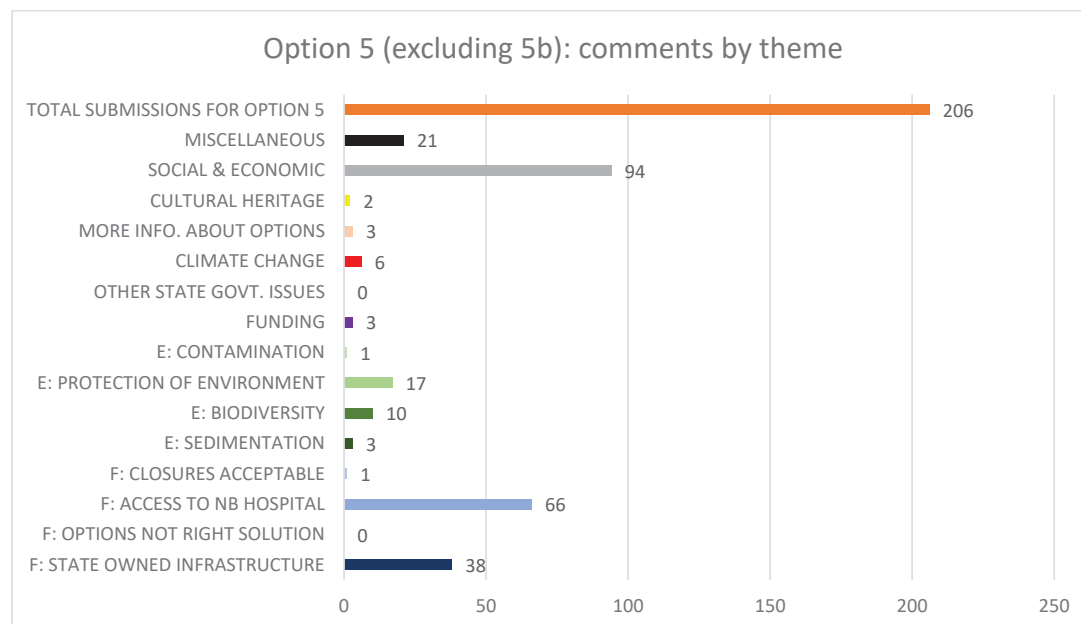
##### 4.1.5.1 Option 5 : 1 in 2-year protection – 40 percent

Figure 8 provides a summary of issues raised by those who selected this option.

There were many supportive comments about the need to protect the Parkway from flooding closure and wanting Council to do what it can within its remit. Many of these comments have been captured within the socio-economic theme as they mostly referred to the overall community benefit from the improvements. One example is presented below.

*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.*

Figure 8: Option 5: 1 in 2-year protection - number of comments by theme



For further examples refer to *Table 31: Social and economic - verbatim comments* in Appendix A.

Along with the mostly positive sentiment, there was some criticism within this group aimed at the road owner as the need to deliver a less flood prone arterial road was the responsibility of state government and not the Council. However, overall those that chose option 5 felt something needed to be done now and “for Council to get on with it”.

The findings also suggested that Council needed to urgently prioritise improvements to mitigate road closures along the Parkway to its maximum capability. One of the key drivers for this improvement was to maintain permanent (or as close to permanent as possible) access to Northern Beaches Hospital for the peninsula residents, as expressed through 74 responses. These comments are reflected in Appendix A at *Table 20: Flooding - access to Northern Beaches Hospital - verbatim comments*.

Overall, option 5 was the most popular choice among all of those who responded to this study. This indicates that there is an appetite among community members for Council to address the flooding along the Parkway.

There was a small group of people who chose option 5 that wanted much more permanent intervention – they were not satisfied with option 5. This group is discussed under option 5b.

#### 4.1.5.2 Option 5 b – Major infrastructure improvement – 6 percent

Approximately 30 responses (or 6 percent of the respondents) requested much more than a 1 in 2 year protection – they wanted much longer term solutions to be considered. Figure 9 illustrates the comments by theme from this group. This included requests for major infrastructure upgrades along the Parkway and were frustrated that bridges, elevating sections using culverts or levees, concrete tunnels underneath to protect wildlife and water flow, road raising and/or road widening hadn’t been presented as potential options.

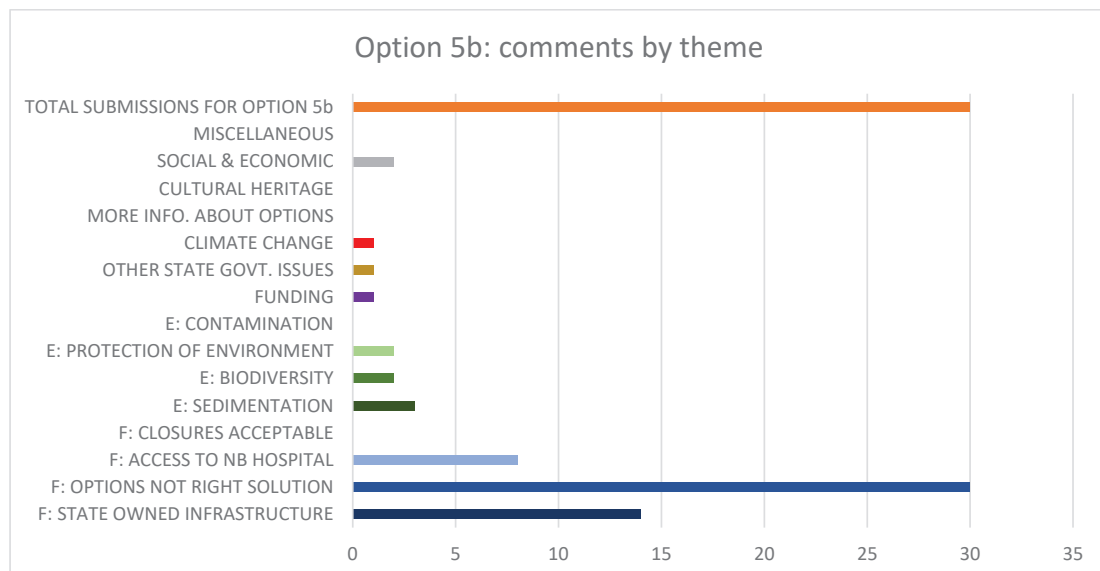
Many shared the view that the options presented by Council only served to reduce flooding and did not eliminate it, which was unacceptable.

There were numerous comments within this group who referenced the need for a dual carriageway to meet the future growth/development needs of the Northern Beaches particularly in advance of the proposed Beaches Tunnel Link that will take traffic from Seaforth to Narrabeen and further north.

*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 road 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.*

It is not evident from this study whether this group might be willing to accept a lesser solution, like option 5, if there was certainty that there are no future plans that include major infrastructure upgrades by the state government.

Figure 9: Option 5b: comments by theme

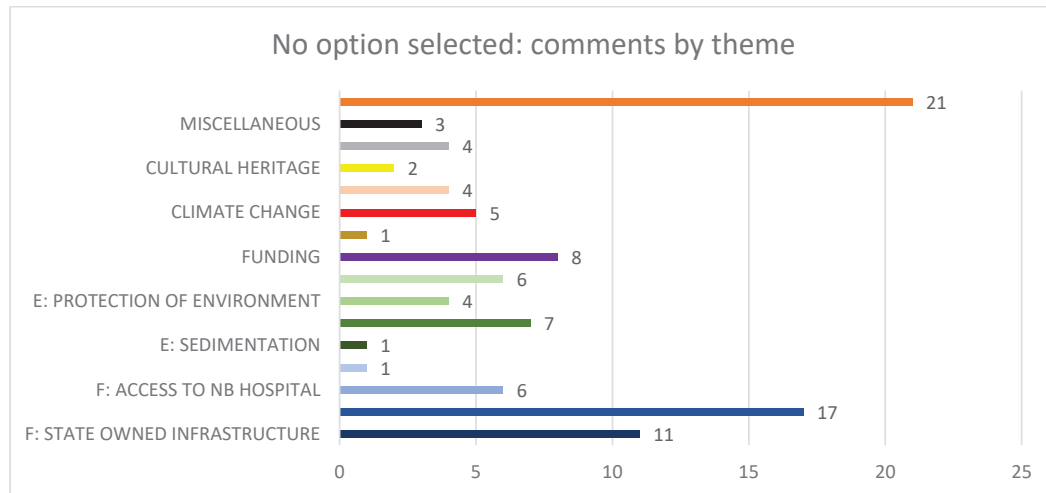


The comments directly relating to issues attached to major infrastructure upgrades can be found in Appendix A: Table 18: Flooding – state owned Infrastructure issues - verbatim comments

#### 4.1.6 No formal option selected (majority of written responses) – 4 percent

There was quite a cross-section of comments within these responses. All of these responses were submitted via email as they provided detailed discussion around the issues of most concern to them and didn't agree with the options presented. The majority of these responses (17) felt that it was not the Council's responsibility to fix the flooding issues on the Parkway and that the options presented in this study were inadequate.

Figure 10: No option selected - comments by themes



Most comments (see Figure 10) related specifically to the road infrastructure improvements needed and that funding such infrastructure should be a state government responsibility.

*“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.”*

Similar to option 5b, it is not evident from this study whether the 17 responses who wanted more permanent infrastructure might be willing to accept a lesser solution, if there was certainty that there were no future plans that include major infrastructure upgrades by the state government.

The remaining four of the 21 respondents who did not select an option, did not want anything done. Their issues were based on the premise that environmental impact from the options presented, would cause unacceptable disturbance and destruction of the bushland.

## 4.2 Responses by themes - discussion

To assist with the data analysis, comments have been coded against themes/issues. Note that there may be some overlap with issues and questions raised across themes, and some duplication of comments that appear in the verbatim comments in Appendix A. This does not impact on the findings of this consultation because the percentage of comments associated with the two key themes of *Flooding* and *Environment* show definite trends. The data has been assessed and analysed and identifies community and stakeholder sentiment about specific issues relating to the options presented in the study.

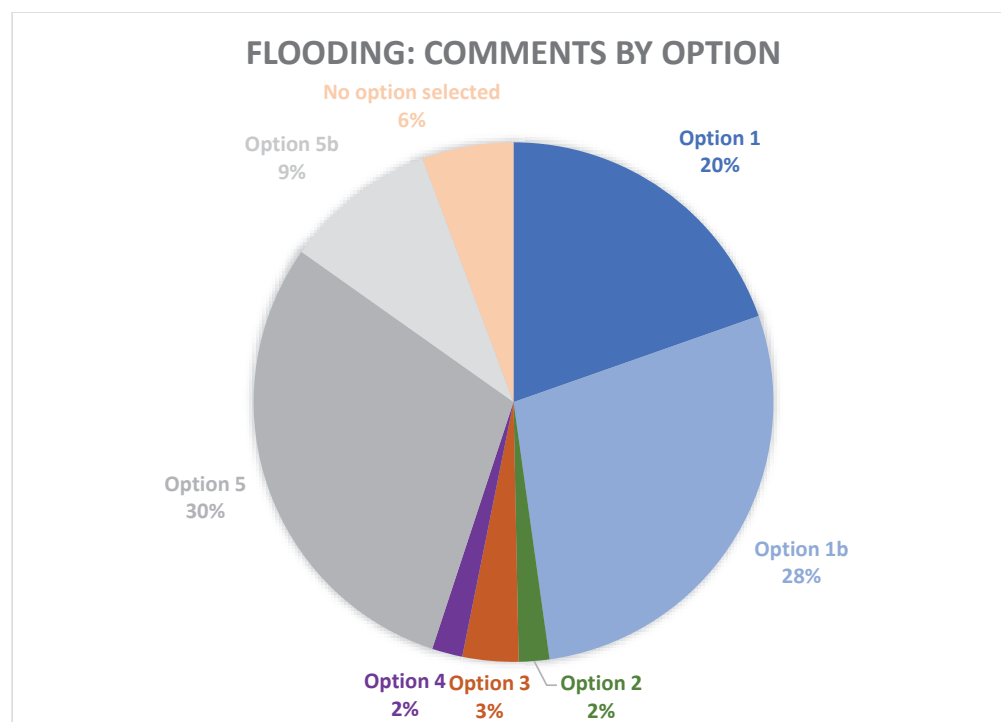
### 4.2.1 Flooding – general discussion

We have classified the *Flooding* theme into four separate issues relating to the road itself, from other non-road issues. To assist with this analysis we have referenced the following four themes:

- 1 Flooding – State owned infrastructure issues
- 2 Flooding – Options presented not the right solution
- 3 Flooding – Access to Northern Beaches Hospital
- 4 Flooding – Closures acceptable

There were over 450 comments attributed to issues relating to the flooding of the Parkway. Figure 11 illustrates the spread of these comments by option chosen across all of flooding themes.

Figure 11: Flooding - comments by option



(The comprehensive list of verbatim comments regarding the flooding themes are presented in Appendix A beginning at page 56.)



#### 4.2.1.1 Flooding theme 1 – state owned infrastructure

Many of the approximately 128 comments suggested that the flood mitigation options presented were inadequate and that a more permanent intervention was required such as raising the road or building bridges – responsibilities which sit with the state government as the asset owner of the Parkway. We have grouped these comments under this theme. Many shared the view that longer term solutions need to be explored further.

Figure 12 shows the spread of comments across the options selected. Note that largest number of these comments are from option 1b – those who want more permanent intervention

Table 3 presents a sample of issues raised among the responses, the response numbers who made comments about this theme, and a response by Council to these issues.

Verbatim comments regarding this issue can be found in Table 18: *Flooding – state owned Infrastructure issues - verbatim comments* in Appendix A at page 56.

Figure 12: Flooding theme 1 - state-owned infrastructure - comments by option

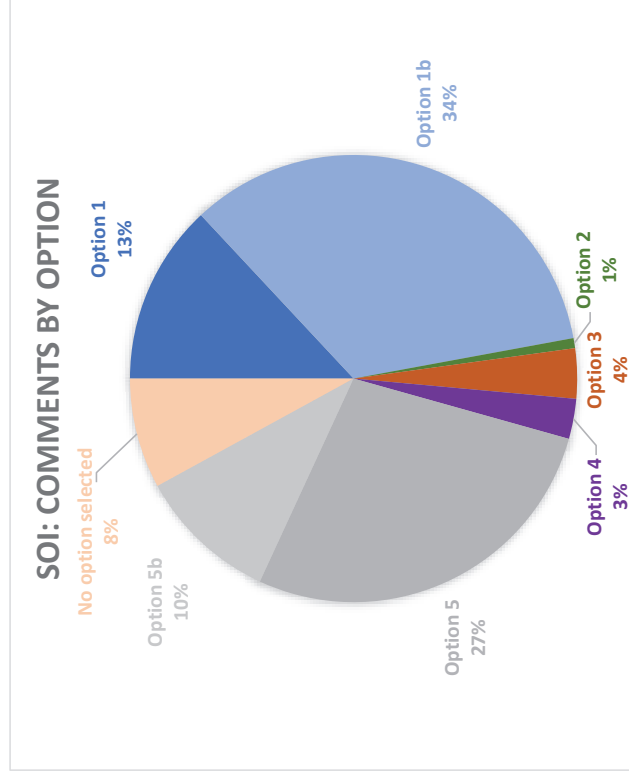


Table 3: Flooding theme 1 – state-owned infrastructure

Flooding theme 1 – State-owned infrastructure	No of comments per option	Response numbers of those that commented about this issue	Council response
<p>Sample questions/issues raised:</p> <ol style="list-style-type: none"> <li>Why doesn't the responsibility of planning and delivering this project sit with the state government?</li> <li>Why doesn't the state government upgrade the road to meet the longer term future needs, providing much needed permanent access, such as raising the road, dual carriageway or building a bridge</li> </ol>	Option 1 65 / 208 responses	S4, S8, S10, S15, S16, S35, S36, S37, S38, S40, S44, S46, S51, S52/S377, S54, S55, S56, S57, S59, S61, S62, S64, S68, S69, S71, S81, S82, S84, S88, S89, S90, S96, S103, S104, S106, S109, S110, S114, S119/S526, S123, S124, S126, S133, S137, S139, S145, S150, S151, S154, S155, S157, S159, S169, S171, S173, S175/S508, S180, S182, S183, S185, S191, S194, S195/S505, S200, S532 S206	<p>The state government is the asset owner of the Parkway. Council received funding from the state government to explore flood mitigation options and complete initial site investigations. This resulted in the exhibited Feasibility Study. (Funding details are covered further under the funding theme below).</p> <p>The Feasibility Study focused on the smaller more frequent floods and did not include larger-scaled flood-proofing options such as road-raising. Any change to the parkway of this nature is the responsibility of the state government though Transport for NSW (TfNSW).</p> <p>There has been no formal indication from TfNSW that it has plans to undertake major infrastructure work on the Parkway. In the meantime, Council is exploring other solutions within areas under Council's care, control and management.</p>
	Option 2 1 / 9 responses		
	Option 3 5 / 25 responses	S216, S218/S529, S222, S223, S224	
	Option 4 4 / 13 responses	S241, S242, S248, S253	
	Option 5 52 / 236 responses	S255, S258, S261, S262, S263, S266, S271, S283, S284, S287, S289/S426, S291/S381, S292, S294, S295, S303, S308/S434, S309, S311, S316, S320, S336, S347, S352, S353/S391, S356, S365, S366, S369, S371, S375, S386, S388, S392, S396, S400, S404, S409, S411, S416, S422, S423, S428, S432, S435, S439, S452, S463, S485, S494, S499, S501	
	No option selected 11/21 responses	S503, S507, S509, S510, S511, S513, S514, S520, S523, S525, S528	

#### 4.2.1.2 Flooding theme 2 – options provided are not the right solution

Issues were mixed across all options with some wanting very little change and others wanting the environment protected at all costs.

Many made compelling arguments in their comments regarding the need to raise roads or build bridges as better, more permanent solutions, with correlating evidence suggesting that many thought this was a more sustainable and environmentally-friendly long-term option.

Figure 13 shows the spread of comments across the options selected. Note the majority of these comments are from option 1b and 5b as well as those who did not select an option, suggesting bridges or raising the roads are better solutions than the options presented in this Feasibility Study.

Table 4 presents a sample of issues raised among the responses, the response numbers who made comments about this theme, and a response by Council to these issues.

Verbatim comments regarding this issue can be found in

*Table 19: Flooding - options presented not the right solution - verbatim comments* in Appendix A at page 68.

Figure 13: Flooding theme 2 - options provided are not the right solution - comments by option

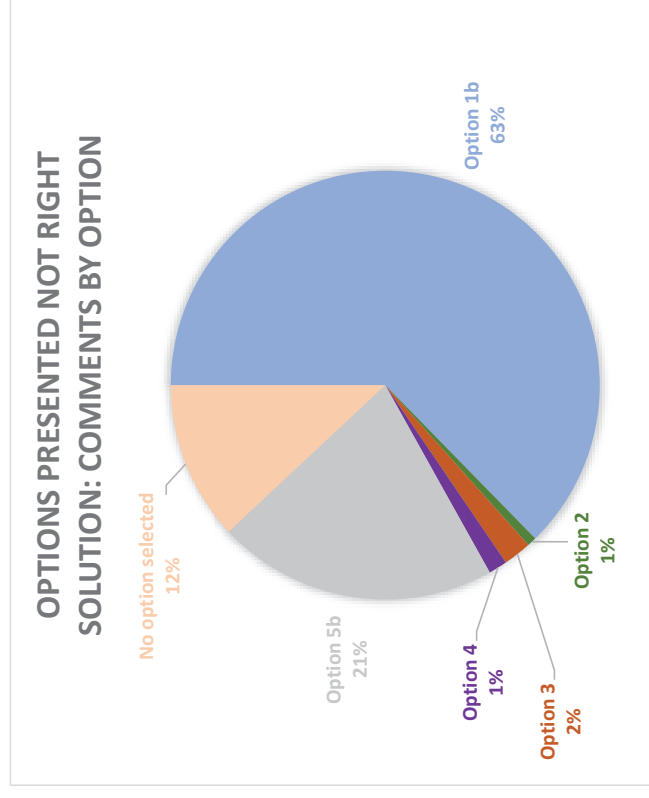


Table 4: Flooding theme 2 - options provided are not the right solution

Theme 2 – Options provided are not the right solution	No of comments per option	Response numbers of those that commented about this issue	Council response
Sample questions/issues raised:	Option 1 89 / 208	S1, S2, S4, S7, S8, S9, S10, S11, S12, S14, S15, S16, S20, S26, S32, S34, S37, S38, S40, S44, S45, S48, S50, S51, S52/S377, S54, S55, S56, S57, S59, S60, S61, S62, S64, S65, S67, S68, S69, S70, S71, S74, S83, S87, S89, S91/S379, S96, S97, S100, S105, S108, S110, S116, S117/S148, S119/S526, S123, S124, S125, S126, S131, S145, S147, S150, S152, S154, S155, S157, S159, S167, S169, S170, S171, S173, S174, S175/S508, S180, S182, S183, S184, S188, S191, S193, S194, S195/S505, S200, S203, S205, S530, S531, S532	Over a period of several years, TfNSW and Council have investigated flooding along the Parkway.  Investigations were conducted in phases with the initial data collection taking place over 2017 to 2018 and further detailed assessments happening in 2019.  A wide range of options were initially considered. An options assessment process, which included identification and assessment of a long list of options and two rounds of shortlisting, resulting in five feasible options being presented from the exhibited Feasibility Study.
1. Can other (less impactful?) mitigation measures permanently stop flooding events, even if it is more expensive?		S206	The Feasibility Study focused on the smaller more frequent floods. Any flood mitigation beyond this would likely require more extensive changes to the road which would be the responsibility of Transport for NSW.
2. Can the road be built up with adequate guttering?	Option 2 1 / 9		
3. Can you build bigger culverts at Oxford Falls?	Option 3 3 / 25	S218/S529, S222, S236	Should the project progress, there is an opportunity to consider catchment management works, creek restoration and opportunities to reduce potential environmental impact.
4. Can you present an option that does not impact the environment as much as these do?	Option 4 2 / 13	S242, S245	
	Option 5 30 / 236	S255, S258, S266, S270, S275, S283, S289/S426, S291/S381, S292, S294, S296, S304, S309, S318, S321, S326, S331, S354, S360, S371, S386, S399, S414/S502, S423, S428, S435, S446, S460, S465, S479	It was apparent in some of the feedback received that many people believe that larger scale infrastructure changes would have lower environmental impacts to the area. Council considers that options such as raised roads and bridges would likely have higher environmental impacts than current proposed options. (This is covered further in the environment theme further in this report.)
	No option selected 17 / 21	S503, S504, S506, S507, S510, S511, S513, S514, S515, S516, S518, S520, S523, S524, S525, S527, S528	

#### 4.2.1.3 Flooding theme 3 – access to Northern Beaches Hospital

A significant number of comments (110) were made regarding permanent access to the Northern Beaches Hospital. There is a direct correlation between those that chose option 5 and the need to maintain permanent access to the hospital. Option 1b also made similar responses placing importance on this community need.

However there were some competing views by those who chose option 1, suggesting that there are adequate alternative routes to take when flooding events impact the Parkway.

Figure 14 shows the spread of comments across the options selected.

Table 5 presents a sample of issues raised among the responses, the response numbers who made comments about this theme, and a response by Council to these issues.

Verbatim comments regarding this issue can be found in *Table 20: Flooding - access to Northern Beaches Hospital - verbatim comments* in Appendix A at page 83.

Figure 14: Access to Northern Beaches Hospital - comments by option

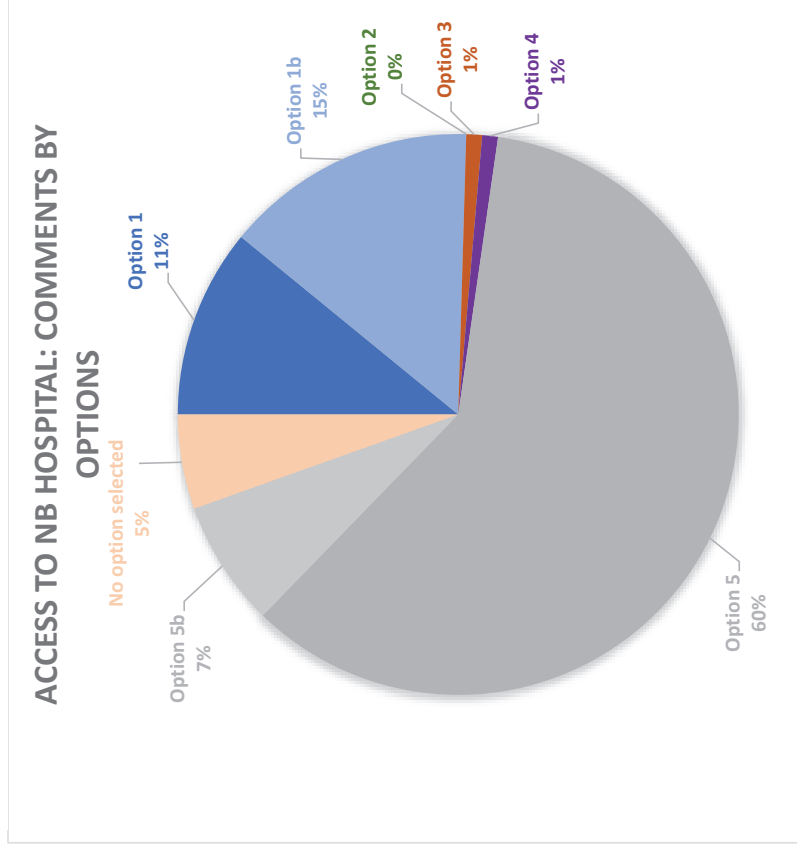


Table 5: Flooding theme 3 - access to Northern Beaches Hospital

Flooding theme 3 – access to Northern Beaches Hospital	No of comments per option	Response numbers of those that commented about this issue	Council response
<p>Sample issues raised:</p> <ol style="list-style-type: none"> <li>Why are works/improvements required when there are suitable route alternatives that are impacted by flood?</li> <li>Does the current assessment of 6-7 flood events per year on average consider alternate routes to the hospital? If not, what is the actual count of events that impeded access to hospital completely?</li> <li>24-hour access to the hospital via this route is critical and must be achieved. What happens when flooding events increase because of climate change? Has Council considered this?</li> </ol>	Option 1 28 / 208	S5, S15, S24, S27, S38, S40, S52/S377, S58/S208, S60, S70, S71, S72, S89, S90, S103, S107, S109, S110, S112, S116, S123, S124, S126, S131, S144, S149, S170, S191	<p>While flooding impacts access to the Hospital via the Parkway, alternative routes, not impacted by flooding, are available. We acknowledge that there are competing community views on how acceptable additional timeframes are when using alternative routes.</p> <p>The key objective of this project is to reduce the frequency of road closures caused by flooding.</p> <p>If the project progresses, then further investigations are likely to consider impacts of climate change, duration of closures and historical impacts of closures.</p>
	Option 3 1 / 25	S240	
	Option 4 1 / 13	S253	
	Option 5 74 / 236	S255, S256, S260, S265, S268/S437, S269, S270, S272/S345, S282, S286, S290/S368, S297, S307, S311, S313, S314, S315, S318, S319, S320, S321, S322, S323, S333, S334, S336, S337, S338, S341, S342, S344, S348, S359, S361, S364, S365, S371, S375, S392, S395, S399, S401, S403, S407, S408, S409, S410, S412, S413/S500, S415, S423, S427, S440, S448, S454, S457, S461, S462, S463, S464, S466, S467, S474, S475, S476, S479, S484, S489, S490, S491, S493, S494, S499, S501	
	No option selected 6 / 21 responses	S507, S511, S513, S514, S525, S528	



#### 4.2.1.4 Flooding theme 4 – closures acceptable

Over 10 percent of respondents felt road closures were acceptable. These comments were not necessarily in response to needing access to the Northern Beaches Hospital, rather that many felt there are other acceptable options to travel south to Frenchs Forrest/Seaforth during the flood events.

The findings told us that most of the sentiment attached to closures being acceptable was expressed by those who chose option 1. They felt the inconvenience of the road closures was minimal compared to the environmental damage the mitigation measures would cause. Other comments disputed ongoing closures being acceptable.

Figure 15 shows the spread of comments across the options selected.

Table 6 provides a sample of issues raised among the responses, the response numbers who made comments about this theme, and a response by Council to these issues.

Verbatim comments regarding this issue can be found in *Table 21: Flooding - closures acceptable - verbatim comments* Appendix A at page 91.

Figure 15: Flooding theme 4 - closures acceptable - comments by option

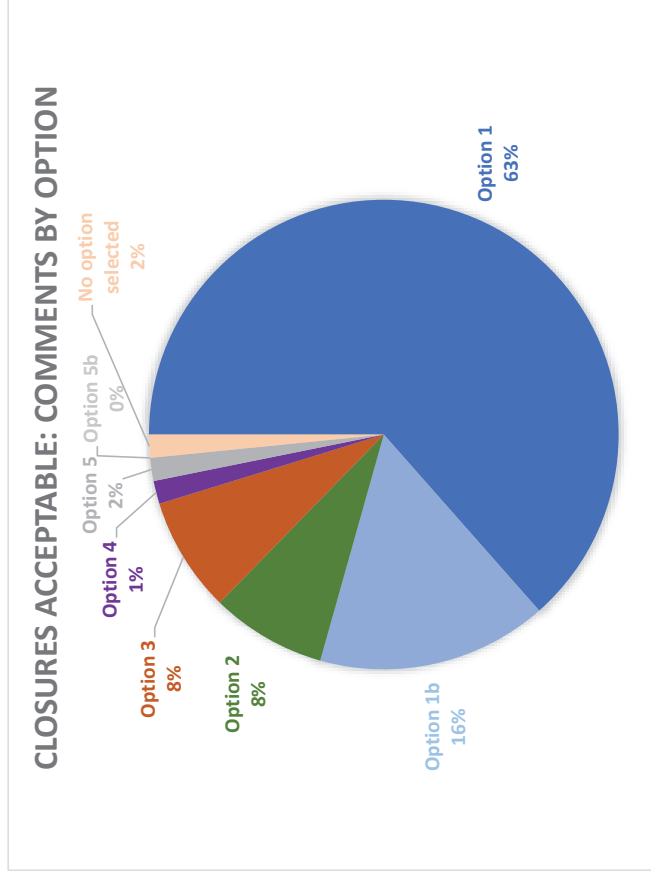


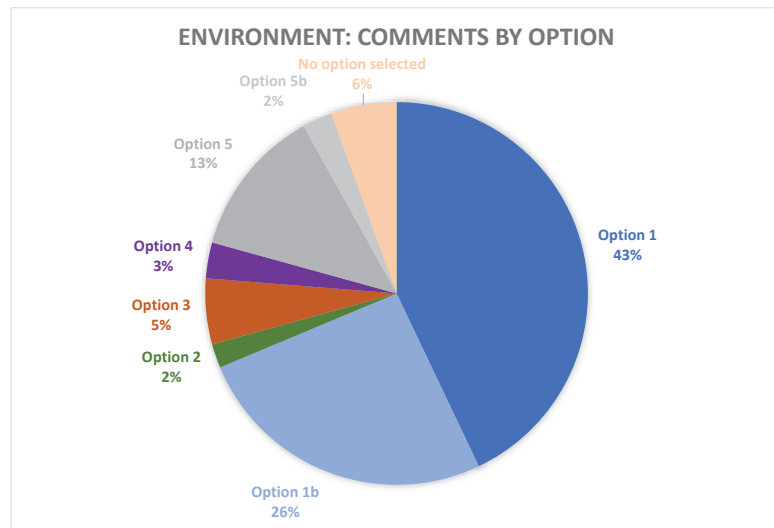
Table 6: Flooding theme 4 - closures acceptable - comments by option

Flooding theme 4 – closures acceptable	No of comments per option	Response numbers of those that commented about this issue	Council response
<p>Sample questions/issues raised:</p> <ol style="list-style-type: none"> <li>Why are improvements required when there are suitable route alternatives that are not impacted by flood/closure and people could just allow extra time in their commute if the road is flooded</li> <li>Duration of road closure Is it possible to have the road opened sooner after a flood event rather than invasive road upgrades?</li> </ol>	Option 1 50 / 208 responses	S1, S5, S7, S29, S30, S31, S41, S47, S50, S60, S63, S65, S72, S73, S74, S77, S78, S80, S81, S87, S93, S95, S98/S201, S99, S102, S107, S113, S115, S121, S127, S129, S130, S132, S134, S139, S141, S143, S149, S156, S160, S161, S162, S178, S184, S186, S197, S203, S204, S205, S521	<p>There are competing community views on how acceptable additional timeframes are when using alternative routes.</p> <p>If the project progresses, then one of the studies we might include is consideration of the duration and impact of closures.</p> <p>TfNSW and emergency services work as quickly as possible to reopen the parkway after a flood event, however, the type and quantity of debris on the parkway impacts the duration of the closure.</p>
	Option 2 5 / 9 responses	S211, S212, S213, S214, S215	
	Option 3 5 / 25 responses	S217, S224, S227, S228, S231	
	Option 4 1/13 responses	S254	
	Option 5 1 / 236 responses	S298	
	No option selected 1 / 21 responses	S511	

#### 4.2.2 Environment – general discussion

Respondents made approximately 257 comments relating to environmental issues. There are some duplicate comments among responses, but we do not believe they have affected the findings and we have included all verbatim comments in Appendix A. Figure 16 illustrates the trend of environmental comments across the options selected.

Figure 16: Environment – comments by option



To assist with analysing the issues raised in the responses directly relating to the environment, the themes have been further separated into the following categories:

- Environment – 1 sedimentation
- Environment – 2 biodiversity
- Environment – 3 protection of the environment
- Environment – 4 contamination

An analysis of the environment themes, the response numbers who raised the issues against these themes, number of comments made by option preference, and a response by Council to these issues are presented in the following four tables.

#### 4.2.2.1 Environment Theme 1 – sedimentation

There were only a small number of comments regarding sediments, and the comments were varied. (Note that there is some overlap /duplication between these comments and those under the contamination theme.) There were concerns that most of the options may cause disturbance to the sediment and in particular, that any disturbance would impact on ecosystems, and they were not comfortable with this.

Other comments related to the need to establish sediment ponds, the ongoing sedimentation and maintenance issues. Ideas were also suggested on how to manage sediment removal.

While there were no discerning trends that emerged within the sediment comments, it highlighted the importance for Council to ensure any progress on options consider the issues raised in this study.

Figure 17 shows the spread of comments across the options selected.

Table 7 provides a sample of issues raised among the responses, the response numbers who made comments about this theme, and a response by Council to these issues.

Verbatim comments regarding this issue can be found in Table 22: *Environment - sedimentation - verbatim comments* Appendix A at page 94.

Figure 17: Environment theme 1 - sedimentation - comments by option

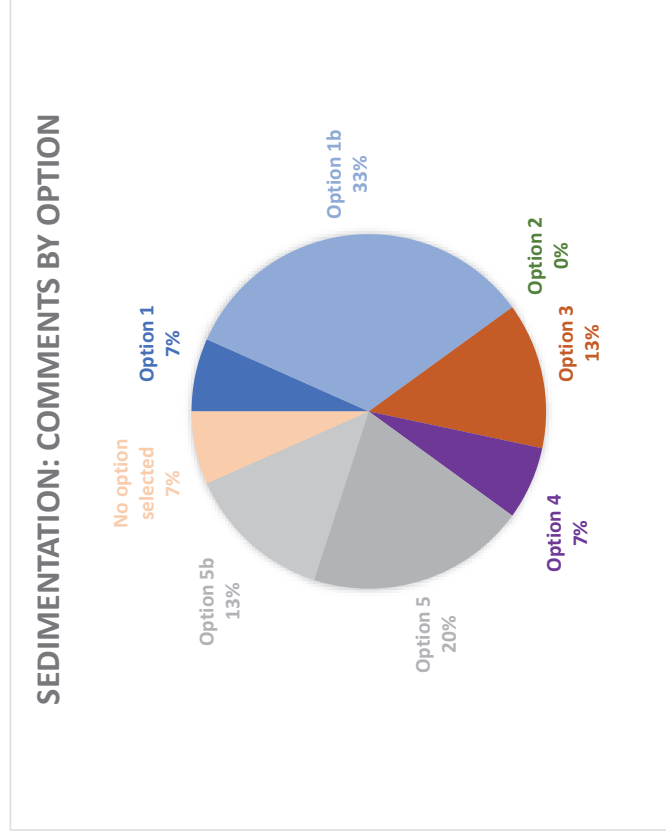


Table 7: Environment theme 1 – sedimentation issues raised and Council response

Environment theme 1 - sedimentation	No of comments per option	Response numbers of those that commented about this issue	Council response
Sample questions/issues raised:	Option 1 6 / 208	S37, S110, S150, S188, S205, S521	All provided options require sediment removal.
1. What is the life span of sediment removal?	Option 3 2 / 25	S220, S231	Contamination mainly occurs around existing culverts. It is unclear at this stage how much sediment is contaminated, but current investigations show that contamination levels are likely treatable and there is likely clean sediment which may be reusable.
2. How can you mitigate impacts from sediment removal?	Option 4 1 / 13	S252	
3. The options presented impose an antiquated engineered solution to an environmental problem. Sediment will continue to be deposited along the corridor.	Option 5 6 / 236	S255, S267, S292, S357, S402, S514/S502	If sediment is to be removed further sediment sampling and analysis will be undertaken to develop a suitable sediment management plan. This will include requirements for environmental management during construction, treatment requirements and disposal or reuse plans.
4. Add a turbidity pool to future proof the proposed works and help council maintain the creek levels going forward.	No option selected 1 / 21	S525	If the project progresses then further design development and environmental approvals are required for the preferred option, or combination of options. This would consider environmental impacts, and mitigation requirements, both during and following construction.
			Ongoing sedimentation is not expected at the levels which have occurred historically, due to changes in sediment control practices. Further studies and assessments of ongoing sedimentation will be required dependent on which options are considered further.

#### 4.2.2.2 Environment Theme 2 – biodiversity

The findings tell us that people care very much about the ecosystem in the parklands and waterways and are concerned that impacts of any flood mitigation measures may have irreversible damage. This is the key reason respondents chose “Do Nothing”.

The remaining respondents who nominated other options also stated concerns regarding the recovery of the area, but thought under careful management, rehabilitation and recovery would be possible, and that there was general sentiment from these respondents that something needed to be done.

The findings tell us that before any decision can be made on an option to move forward, deeper understanding of impacts, and whether more robust measures can be implemented, would need to be explored to help address some of the issues being raised.

Figure 18 shows the spread of comments across the options selected.

Table 8 provides a sample of issues raised among the responses, the response numbers who made comments about this theme, and a response by Council to these issues.

Verbatim comments regarding this issue can be found in *Table 23: Environment - biodiversity verbatim comments* Appendix A at page 96.

Figure 18: Environment theme 2 - biodiversity - comments by option

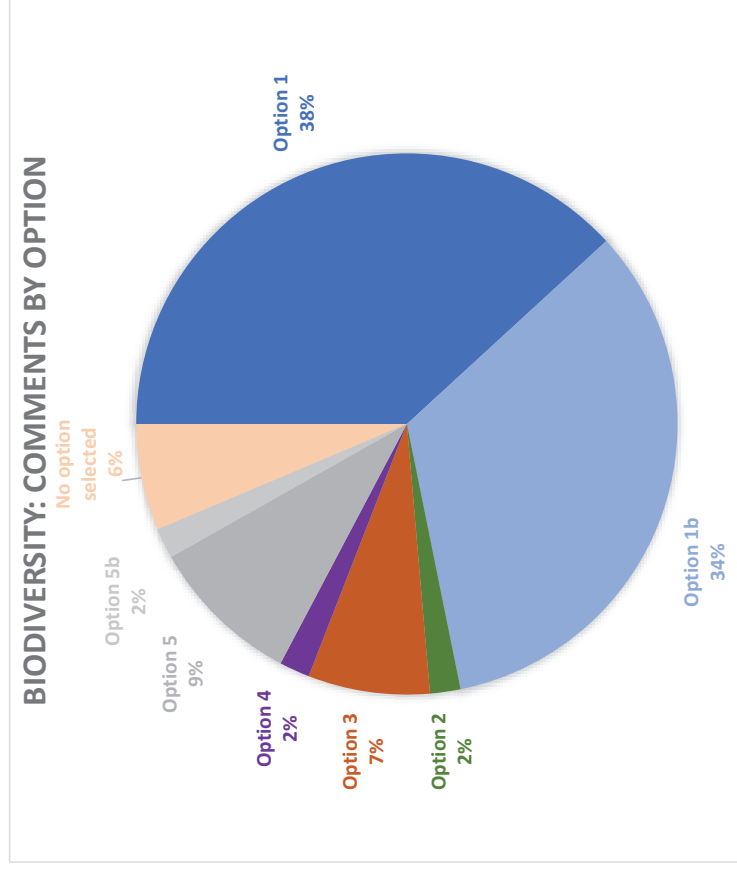




Table 8: Environment theme 2 - biodiversity

Environment theme 2 - biodiversity	No of comments per option	Response numbers of those that commented about this issue	Council response
<p>The findings tell us that people care very much about the ecosystem in the parklands and waterways and are concerned that impacts of any flood mitigation measures may have irreversible damage. This is the key reason respondents chose "Do Nothing".</p> <p>The remaining respondents who nominated other options also stated concerns regarding the recovery of the area, but thought under careful management, rehabilitation and recovery would be possible, and that there was general sentiment from these respondents that something needed to be done.</p> <p>Key questions/issues raised:</p> <ol style="list-style-type: none"> <li>1. How will threatened ecological communities be protected if you do any of this work?</li> <li>2. Will removing exotic weed species and restoration of local vegetation communities be done so that it maintains respect for the native environment that remains?</li> </ol>	Option 1 79 / 208	S1, S4, S5, S6, S8, S9, S10, S13, S17, S21, S22, S25, S26, S27, S28, S29, S35, S37, S38, S39, S40, S45, S48, S50, S56, S58/S208, S60, S62, S63, S64, S65, S66, S68, S69, S73, S74, S76, S83, S86, S93, S94, S95, S96, S97, S99, S103, S104, S110, S112, S121, S128, S138, S140, S141, S145, S146, S150, S153, S155, S156, S157, S161, S163, S166, S181, S185, S188, S191, S193, S194, S197, S202, S203, S205, S519, S521, S530, S531, S532	<p>If the project progresses, then further design development and environmental approvals will be required. This would consider environmental impacts, and mitigation requirements, both during and following construction.</p> <p>The preliminary biodiversity assessment noted that the area being cleared provides ideal foraging habitat for at least 15 threatened species listed in the Biodiversity Conservation act and Environmental Protection and Biodiversity Conservation Act. However, individual fauna from these species weren't observed during the assessment. We will know more when detailed environmental investigations take place.</p> <p>Should Council elect to proceed with an option in these locations, significant mitigation and environmental offsets would be required under the Biodiversity Conservation Act 2016. This would involve the likely preparation of Species Impact Statements or Biodiversity Development Assessment Reports and subsequent Environmental Impact Statements in accordance NSW Government legislation.</p> <p>Although some options involve the removal of significant areas of native vegetation, Council will ensure creek and bushland restoration are</p>
	Option 2 2 / 9	S207, S209	
	Option 3 8 / 25	S217, S218/S529, S219, S222, S226, S227, S228, S232	
	Option 4 2 / 13	S244, S251	
	Option 5 12 / 236	S255, S258, S287, S350, S376, S382, S387, S394, S401, S424/S498, S429, S472	
	No option selected 7 / 21	S503, S510, S512, S514, S515, S516, S523	

<p>3. How will biodiversity/ecosystem be protected and/or rehabilitated?</p> <p>4. How many trees will be cleared for these options?</p> <p>5. Has fencing, underpasses and overpasses been considered to protect the fauna during and post construction?</p>		<p>prioritised in the design, construction and maintenance process. The project will endeavour to restore the environment in the longer term, while maintaining a reduced level of flooding.</p> <p>The number of tree removals is not yet known. More information on environmental and clearing impacts will be presented when more detailed investigations have taken place. Three plant community types (environments) classified as threatened ecological communities were found in the area where clearing is needed, no individual threatened plant species were observed in current surveys. We will know more when detailed environmental investigations are undertaken. Tree replacements using seedlings and established trees of similar species will likely form part of the restoration process if the project proceeds.</p>
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#### 4.2.2.3 Environment Theme 3 – protecting the environment

Those grouped under this theme generally indicated that no matter which option is chosen, the environment needs to be protected. There is a direct correlation between those who chose option 1 and the critical importance to ensure the environment is protected at all costs. This group does not want any option because they are concerned that any damage would be irreparable.

Much more investigative work is required to help determine whether more robust measures to protect the environment can be implemented as part of Council's consideration of a preferred option.

Figure 19 shows the spread of comments across the options selected.

Table 9 provides a sample of issues raised among the responses, the response numbers who made comments about this theme, and a response by Council to these issues.

Verbatim comments regarding this issue can be found in Table 24: *Environment - protection - verbatim comments* Appendix A at page 109.

Figure 19: Environment theme 3 – protecting the environment - comments by option

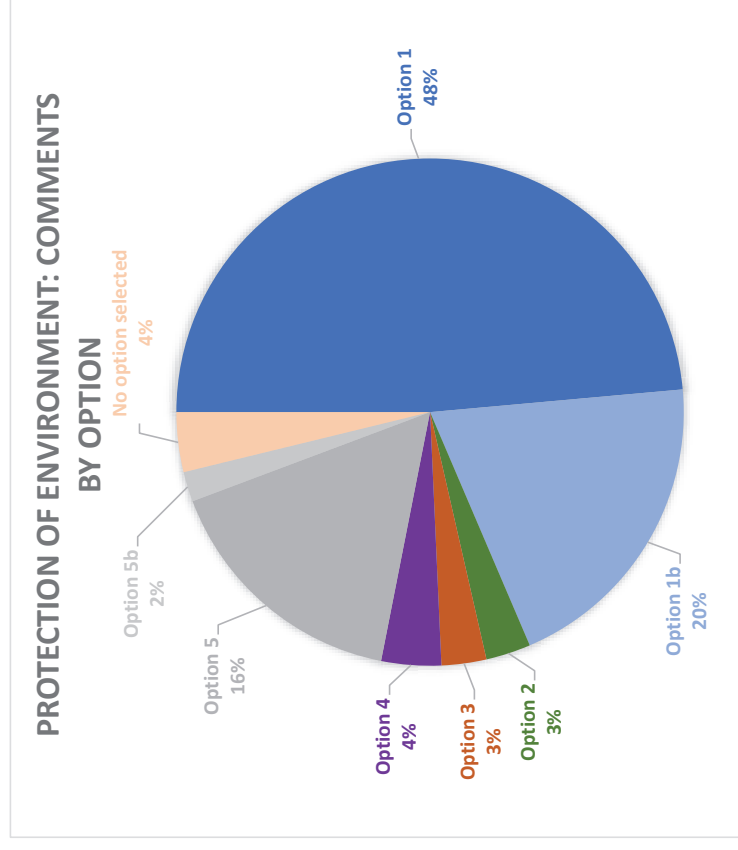


Table 9: Environment theme 3 - protecting the environment

Environment theme 3 – protecting the environment	No of comments per option	Response numbers of those that commented about this issue	Council response
Sample questions/issues raised:	Option 1 72 / 208	S1, S2, S3, S7, S18, S19, S22, S23, S24, S27, S29, S33, S34, S38, S41, S42, S44, S48, S50, S51, S54, S58/S208, S60, S61, S66, S70, S72, S78, S79, S85, S86, S91/S379, S92, S94, S97, S98/S201, S101, S102, S107, S113, S118, S122, S124, S127, S131, S132, S135, S139, S142, S149, S150, S151, S152, S162, S164, S165, S168, S172, S176, S177, S179, S184, S187, S189, S190, S192, S196, S198, S199, S204, S205, S521	if the project progresses, then further design development and environmental approvals will be required. This would consider environmental impacts, and mitigation requirements, both during and following construction.  Should Council elect to proceed with an option, significant mitigation and environmental offsets would be required under the Biodiversity Conservation Act 2016. This would likely involve the preparation of Species Impact Statements or Biodiversity Development Assessment Reports and subsequent Environmental Impact Statements in accordance NSW Government legislation.
1. How can Council justify this work when the stated objective in Council's strategic plan regarding the preservation is in conflict with this?	Option 2 3 / 9	S206, S210, S215	Although some options involve the removal of significant areas of native vegetation, Council will ensure creek and bushland restoration are prioritised in the design, construction and maintenance process.
2. How can Council undertake this work and guarantee minimal impact on the environment?	Option 3 3 / 25	S218/S529, S233, S235	Further investigations will identify ways to restore the environment in the longer term, while maintaining a reduced level of flooding. Further investigation may also show opportunity for reducing environmental impact of the options.
3. The benefit of the proposed flood mitigation options is easily quantified in terms of reducing the incidence of flood events during the year. How do you quantify the multiple benefits of preserving the environment?	Option 4 4 / 13	S241, S245, S247, S249	
4. What can Council do to ensure a robust rehabilitation program post construction improves the area by removing the weeds and exotic flora and fosters regrowth of native vegetation?	Option 5 19 / 236	S250/S274, S256, S257, S277, S278, S280, S283, S305, S317, S329, S376, S380, S382, S413/S500, S414/S502, S415, S419, S450, S492	
5. How can Council guarantee that these works do not create lasting degraded environmental outcomes?	No option selected 4 / 21	S509, S511, S514, S522	

#### 4.2.2.4 Environment Theme 4 – contamination

Most of the comments raised under this theme stated concerns about the risks broadly to the ecosystem if sediments were disturbed and travelled downstream to Narrabeen Lagoon. (Note that there is some overlap between the comments from this theme and sedimentation.)

More detailed studies would be needed to confirm the likely impacts of sediment removal on contaminants.

Figure 20 shows the spread of comments across the options selected.

Table 10 provides a sample of issues raised among the responses, the response numbers who made comments about this theme, and a response by Council to these issues.

Verbatim comments regarding this issue can be found in Table 25: *Environment - contamination - verbatim comments* Appendix A at page 115.

Figure 20: Environment theme 4 - contamination - comments by option

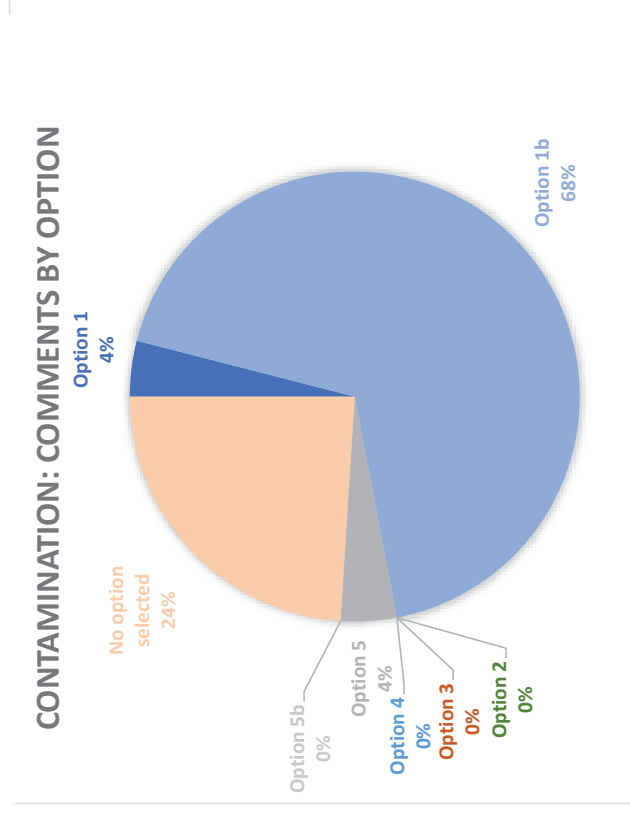


Table 10: Environment theme 4 - contamination

Environment theme 4 - contamination	No of comments per option	Response numbers of those that commented about this issue	Council response
<p>Most of the comments raised under this theme stated concerns about the risks broadly to the ecosystem if sediments were disturbed and travelled downstream to Narrabeen Lagoon.</p> <p>Key questions/issues raised:</p> <ol style="list-style-type: none"> <li>1. What are you doing to avoid risks to the ecosystem of disturbed sediments travelling downstream to Narrabeen Lagoon?</li> <li>2. How much of the sediment slated for removal is contaminated?</li> <li>3. Why were costs attached to sediment removal were not disclosed and does this include treatment and disposal of any contaminants that would be disturbed?</li> </ol>	Option 1 18 / 208	S4, S8, S10, S14, S38, S45, S48, S56, S62, S64, S124, S136, S145, S157, S203, S205, S530, S531	<p>Contamination mainly occurs around existing culverts. It is unclear at this stage how much sediment is contaminated, but current investigations show that contamination levels are likely treatable and there is likely clean sediment which may be reusable.</p> <p>If sediment is to be removed further sediment sampling and analysis will be undertaken to develop a suitable sediment management plan. This will include requirements for environmental management during construction, treatment requirements and disposal or reuse plans. Following this, costs would be estimated for the treatment, disposal or reuse of the sediment.</p>
	Option 5 1 / 236	S324	
	No option selected 6 / 21	S503, S507, S510, S514, S516, S523	



#### 4.2.3 Funding

The majority of respondents who commented about funding felt strongly that any road improvements to the Parkway should be funded by the state government, not by Council. This was mostly expressed by those who chose option 1b. The findings tell us that those who commented on this theme had an expectation that major road improvements are needed/expected and that these would be funded by the state government. Others want more information on how such funding is provided

There were also minority comments who supported the project encouraging Council to wisely use the allocated funding.

Figure 21 illustrates the spread of comments across the various options.

Table 11 summarises the issues raised regarding funding issues, the response numbers who raised the issues against this theme, number of comments made by option preference, and a response by Council to these issues. Note that matters regarding funding were also stated within the Flooding and Environment sections so there is likely to be some overlap with these comments.

Verbatim comments regarding this issue can be found in Table 26: *Funding - verbatim comments* Appendix A at page 118.

Figure 21: Funding issues: comments by option

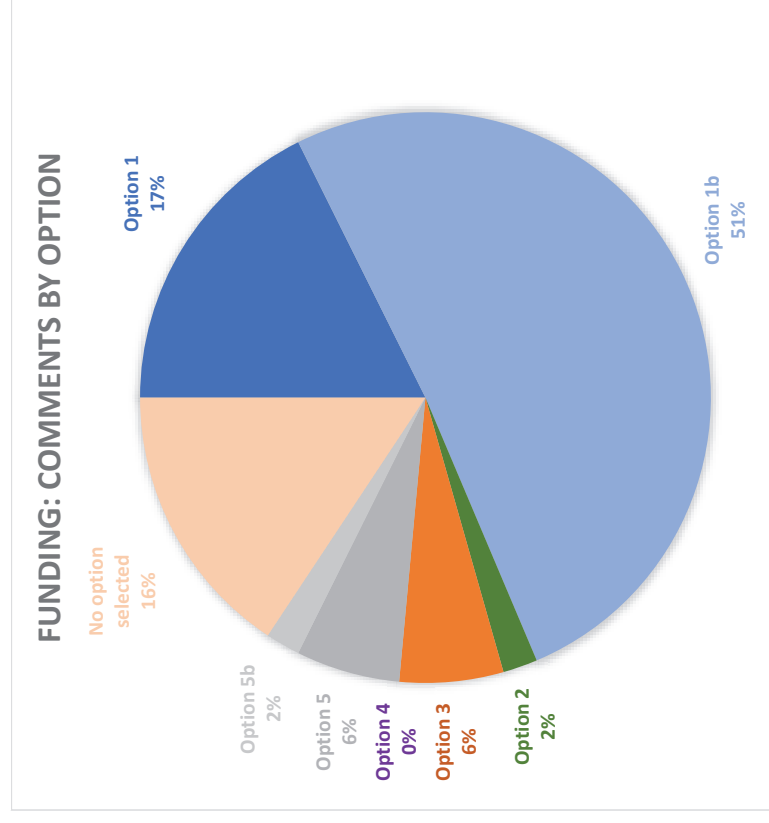


Table 11: Funding

Funding issues	No of comments per option	Response numbers of those that commented about this issue	Council response
Sample questions/issues raised:			
1. Where does the funding come from?	Option 1 35 / 208	S1, S8, S10, S12, S14, S15, S16, S20, S37, S38, S40, S45, S49, S52/S377, S54, S56, S62, S64, S83, S84, S88, S89, S91/S379, S107, S110, S126, S131, S132, S161, S172, S178, S196, S203, S205, S531	All funding is being provided by the state government for the specific purpose of reducing frequent flooding to the Parkway.
2. What if the final costs are more than the allocated funding? Will rate payers have to foot the bill?			In late 2017, Council received \$5 million in grant funding through the Stronger Communities Fund from the Office of Local Government to investigate and implement options to address the frequent flooding of the Parkway. Through this grant program, Council completed a number of site investigations and detailed modelling which resulted in the Feasibility Study.
3. Could Council 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?	Option 2 1 / 9	S210	
	Option 3 3 / 25	S226, S230, S240	
4. Can Council redirect the funding 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)?	Option 5 3 / 236	S354, S402, S421	In 2019 Council wrote to Transport for NSW (TfNSW) to request the availability of additional funding. In November 2020 an additional \$13.1 million was included in the 20/21 and 21/22 NSW Government's budget to permit any option or combination of options to be delivered.
	No Option selected 8 / 21	S503, S510, S511, S513, S514, S516, S518, S523	

#### 4.2.4 Other state government issues

There was a small number of responses that made comments about the state government responsibilities regarding this project.

Most of these were critical of the state government for not taking responsibility for addressing the flooding issues on the Parkway. There is a direct correlation between those respondents who did not think the current options were adequate and criticisms of the state government for not having addressed the road upgrade. Generally, the issues related to the function of the Parkway and future surrounding development.

Figure 22 illustrates the spread of comments across the various options.

Table 12 summarises the issues raised regarding this theme, the response numbers who raised the issues against this theme, number of comments made by option preference, and a response by Council to these issues.

Verbatim comments regarding this issue can be found in Table 27: Other Government Issues - verbatim comments Appendix A at page 121.

Figure 22: Other State government issues: comments by option

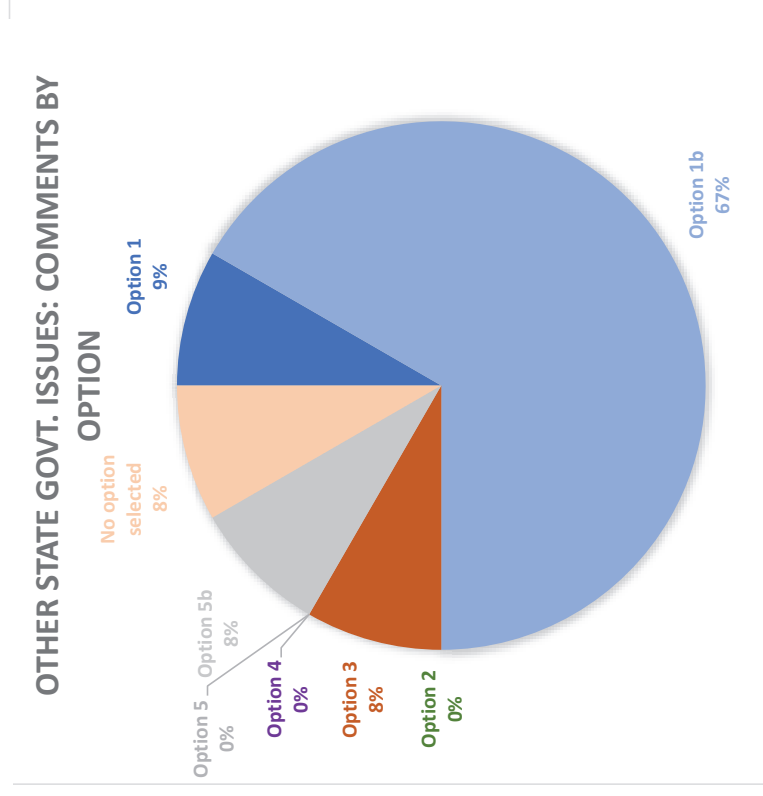


Table 12: Other state government issues

Other state government issues	No of comments per option	Response numbers of those that commented about this issue	Council response
Sample questions/issues raised:	Option 1 9 / 208	S4, S45, S54, S110, S116, S117/S148, S124, S140, S205	Council could make the decision to look for other opportunities to reduce flood closure events without proceeding with one of the currently presented options. This could include negotiating with the state government for solutions that deliver longer term flood mitigations, or revisiting options to identify similar flood mitigation outcomes with reduced environmental impact.  The Northern Beaches Local Housing Strategy identifies our contribution will be to at least meet the additional demand for social and affordable housing dwellings (1,880 dwellings) between 2016 and 2036. This is in line with the NSW Government's Our Greater Sydney 2056 North District Plan. The Parkway project is not related to housing strategy or numbers of dwellings proposed.
1. Can Council lobby state government to release all research and costing to raise the road at key points - mainly the low lying bends?	Option 3 1 / 25	S222	
2. Is this an opportunity to push more housing into the Northern Beaches?	Option 5 1 / 236	S255	
	No option selected 1 / 21	S507	

#### 4.2.5 Climate change issues

There were 39 responses that commented on climate change.

The general feeling among the majority of respondents who commented on climate change felt that the options presented did not consider climate change and the impact it will have on the increasing frequency of flood events.

Those who chose option 5 stated that Council needs to consider climate change in further option discussions.

Figure 23 illustrates the spread of comments across the various options.

Table 13 summarises the issues raised regarding this theme, the response numbers who raised the issues against this theme, number of comments made by option preference, and a response by Council to these issues.

Verbatim comments regarding this issue can be found in Table 28: *Climate change - verbatim comments* Appendix A at page 122.

Figure 23: Climate change: comments by option

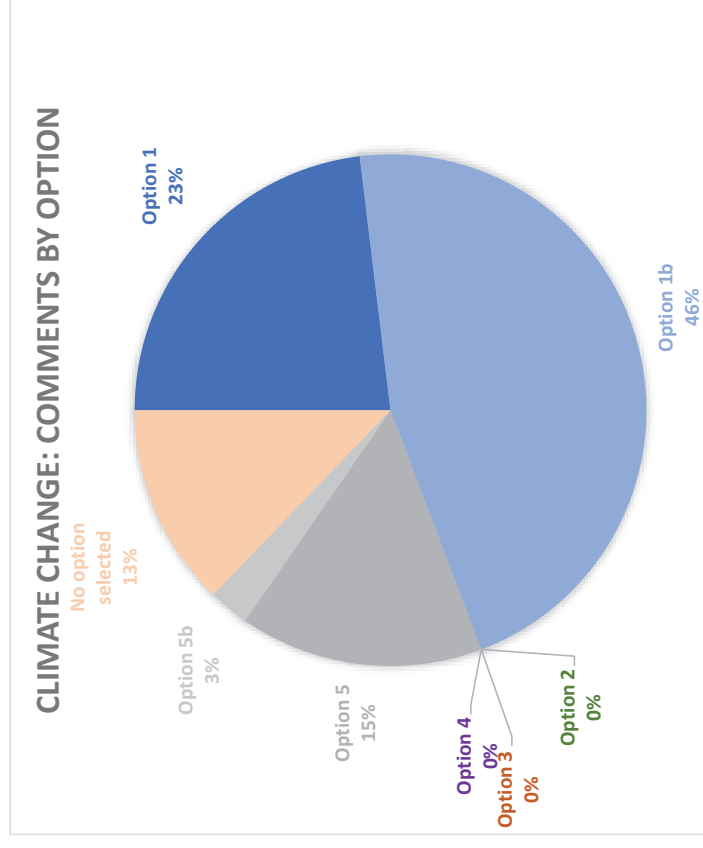


Table 13: Climate change issues

Climate change	No of comments per option	Response numbers of those that commented about this issue	Council response
Sample questions/issues raised:			
1. Does the project consider climate change impacts? If not, why not?	Option 1 27 / 208	S4, S5, S6, S7, S8, S9, S10, S14, S16, S26, S28, S29, S38, S45, S56, S59, S62, S64, S88, S94, S123, S133, S136, S153, S157, S203, S205	The Feasibility Study focused on reducing very frequent flooding from Middle Creek under present conditions. The impacts of climate change, on the shortlisted options, would largely be due to increases in rainfall intensity. The level of flood mitigation offered by the shortlisted options would therefore reduce over time, with increasing rainfall. Climate change would be further considered at subsequent project stages.
2. How have the options considered the increasing frequency of flood events predicted due to climate change?	Option 5 7 / 236	S258, S276, S287, S306, S365, S443, S471	
	No option selected 5 / 25	S507, S510, S515, S516, S523	



#### 4.2.6 More information about options requested

Many of these comments were requests more information about the options. There is a significant correlation with those that want more information and those that were not satisfied with the current options presented (option 1b, no option selected).

Figure 24 illustrates the spread of comments across the various options.

Table 14 provides commentary on the issues raised regarding this theme, the response numbers who raised the issues against this theme, number of comments made by option preference, and a response by Council to these issues.

Verbatim comments regarding this issue can be found in Table 29: *More information about options needed - verbatim comments* Appendix A at page 125.

Figure 24: More information about options: comments by option

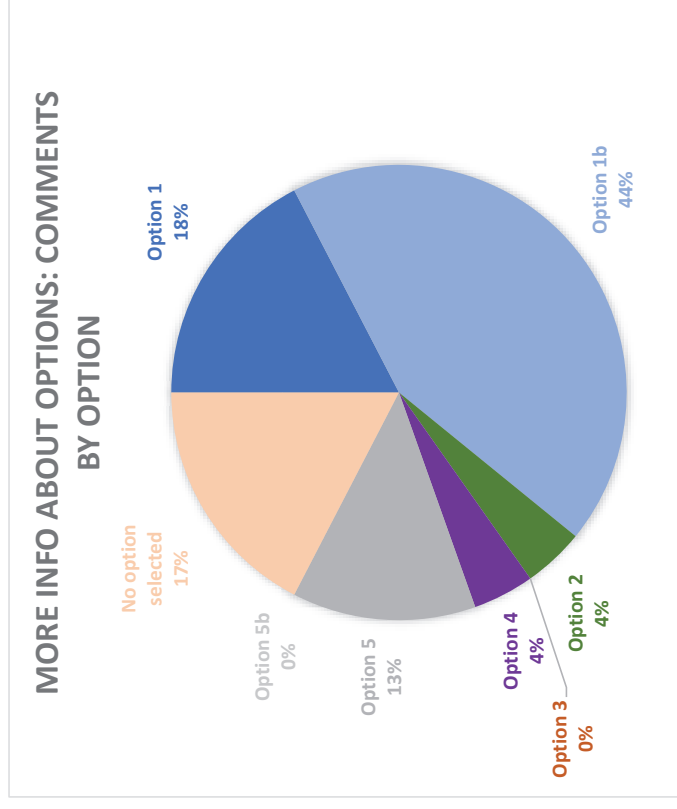


Table 14: More information about options requested

More information about options requested	No of comments per option	Response numbers of those that commented about this issue	Council response
<p>A range of issues were noted under this theme.</p> <p>People who commented generally wanted more detail about the options regarding a variety of issues.</p> <p>These included but were not limited to costs to flood proof property, operational and maintenance activities, and the actual economic and environment costs of each option.</p>	Option 1 14 / 208	S5, S40, S56, S86, S96, S116, S123, S131, S133, S145, S157, S198, S203, S205,	Should the project progress then a range of further studies and environmental assessment will be required. Council will continue to consult with the community and provide further information as it becomes available.
	Option 2 1 / 9	S210	
	Option 4 1 / 13	S247	The project is likely to have a series of stages where information, including designs, will be made available to the community for information and consultation. As this project is potentially a State Significant Development, these stages will most likely include:
			<ul style="list-style-type: none"> <li>• Development and lodgement of a scoping report.</li> <li>• Preparation of an Environmental Impact Statement.</li> <li>• Exhibition of the Development Application.</li> </ul>
	Option 5 3 / 236	S340, S374, S411	Community consultation is essential and integral at all these stages.
	No option selected 4 / 21	S503, S510, S516, S523	

#### 4.2.7 Cultural heritage

There were a small number of responses that commented on Indigenous heritage. There were no comments on European heritage. The main issue raised among the responses was the importance to ensure indigenous heritage is protected, no matter what option is chosen.

Figure 25 illustrates the spread of comments across the various options.

Table 15 describes the issues raised regarding this theme, the response numbers who raised the issues against this theme, number of comments made by option preference, and a response by Council to these issues.

Verbatim comments regarding this issue can be found in *Table 30: Cultural heritage - verbatim comments* Appendix A at page 127.

Figure 25: Cultural heritage: comments by option

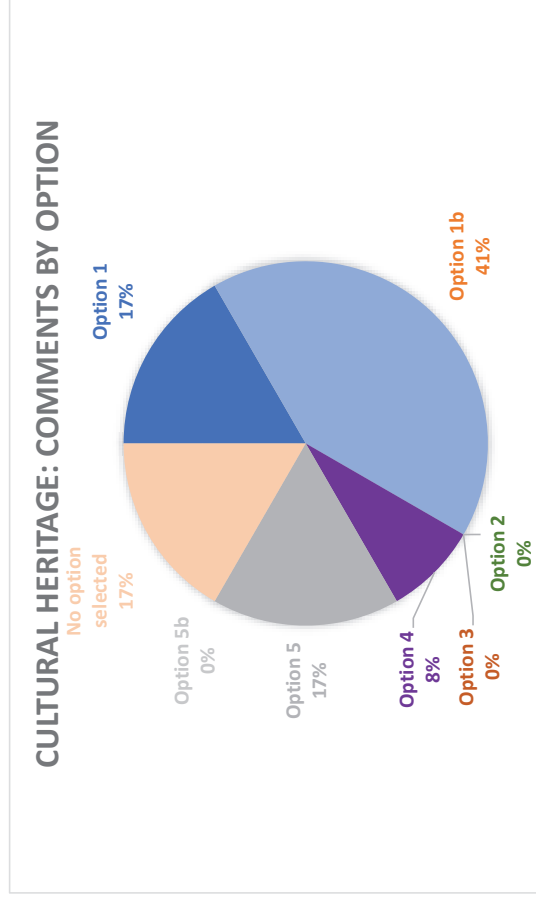


Table 15: Cultural heritage

Cultural heritage	No of Comments per Option	Response numbers of those that commented about this issue	Council response
Key questions/issues raised:	Option 1 7 / 208	S4, S8, S10, S58/S208, S73, S110, S203	As is Council practice, consultation will continue, and will include engagement with the relevant traditional owners.  No sites have been identified within the study area, although Council is aware of the sites in the greater region.
1. What consultation has Council undertaken with the Indigenous custodians of the land?	Option 4 1 / 13	S244	
2. What are the effects of the options on Indigenous heritage?	Options 5 2 / 236	S350, S387	
	No option selected 2 / 21	S503, S514	

#### 4.2.8 Social and economic issues

We have grouped over 130 responses that sit within this theme. They mostly consist of comments reflecting more general statements regarding overall community amenity and interface with the Parkway. There is a direct correlation between those who chose option 5 (most of the comments) and the belief that the community and social benefits of having connectivity outweigh the environmental impacts – although some were torn between these principles.

Some comments expressed that they did not want to compromise the existing amenity; that the cost benefit did not stack up. Others shared different views – that it was important to undertake improvements, and while respectful of environmental issues, the overall current and future community benefit was the most important element.

Figure 26 illustrates the spread of comments across the various options.

Table 16 describes the issues raised regarding this theme, the response numbers who raised the issues against this theme, number of comments made by option preference, and a response by Council to these issues.

Verbatim comments regarding this issue can be found in Table 31: *Social and economic - verbatim comments* Appendix A at page 128.

Figure 26: Social and economic issues: comments by option

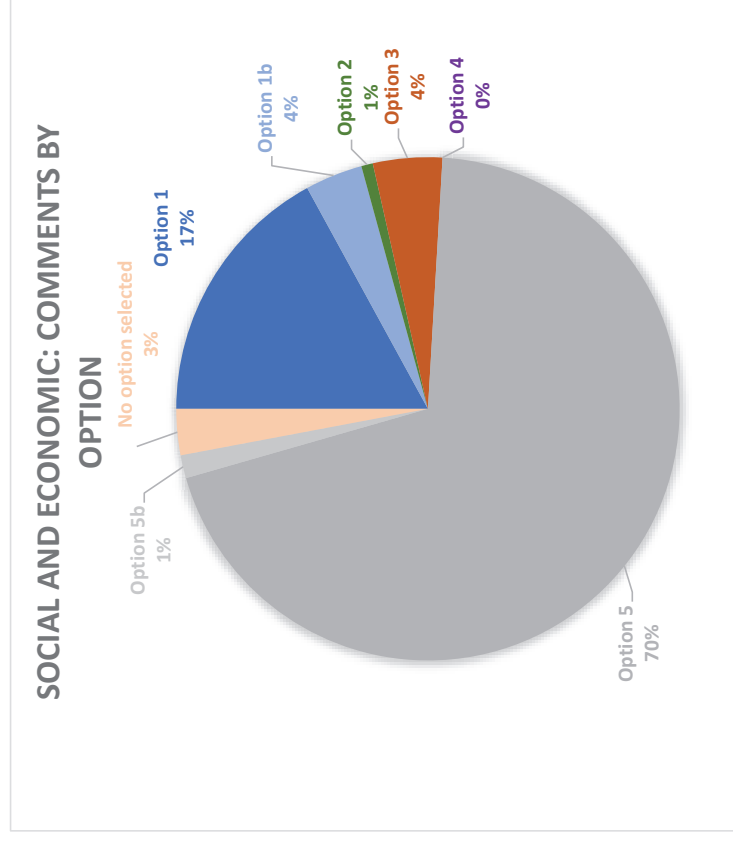


Table 16: Social and economic issues

Social and economic	No of comments per option	Response numbers of those that commented about this issue	Council response
Sample questions/issues raised:	Option 1 28 / 208	S1, S5, S16, S24, S28, S36, S44, S49, S53, S61, S63, S65, S73, S75, S77, S80, S94, S99, S102, S107, S111, S127, S143, S178, S179, S181, S185, S192	<p>A wide range of options were initially considered with the shortlisted options presented in the Feasibility Study considered the most feasible. These shortlisted options were assessed based on a Multi Criteria Analysis (MCA), where cost is one criterion.</p> <p>This project focuses on reducing frequent flood events impacting the parkway. The feasibility study does not assess travel patterns, increasing (or decreasing) capacity or improving travel times.</p> <p>Should the project progress, there is an opportunity to consider wider creek issues and benefits which could support improvements to cycle and pedestrian connections along the parkway.</p> <p>We will continue to explore ways to incorporate ideas that benefit social wellbeing while carefully managing costs</p>
1. Has or will a socio-economic cost benefit analysis be completed?	Option 2 1 / 9 responses	S211	
2. How has Council considered in its model that commuter travel is changing – more people working from home?	Option 3 6 / 25	S217, S234, S235, S237, S238, S239	
3. Will you improve cycle/pedestrian connects as part of any work?	Option 5 96 / 236	S256, S261, S273, S279, S288, S291/S381, S298, S299, S300, S301, S302, S306, S307, S310, S312, S319, S323, S325, S327, S328, S330, S332, S333, S334, S335, S339, S343, S346, S349, S350, S351, S354, S362, S363, S367, S373, S374, S375, S378, S380, S383, S384, S385, S387, S389, S393, S395, S397, S398, S404, S405, S406, S407, S408, S412, S413/S500, S415, S417, S418, S420, S424/S498, S425, S430, S431, S433, S436, S438, S439, S441, S444, S447, S449, S453, S455, S457, S458, S459, S462, S463, S467, S470, S473, S474, S476, S477, S480, S481, S482, S483, S484, S487, S488, S495, S496, S497, S501	
	No options selected 4 / 21	S509, S511, S515, S518	

#### 4.2.9 Miscellaneous

A small number of comments about a variety of issues emerged among the responses that didn't naturally fit within other themes. These have been assigned to miscellaneous. No trends emerged among these responses.

Figure 27 illustrates the spread of comments across the various options.

Table 17 provides a sample of the issues raised regarding this theme, the response numbers who raised the issues against this theme, number of comments made by option preference, and a response by Council to these issues.

Verbatim comments regarding this issue can be found in Table 32: *Miscellaneous - verbatim comments* Appendix A at page 135.

Figure 27: Miscellaneous comments by option

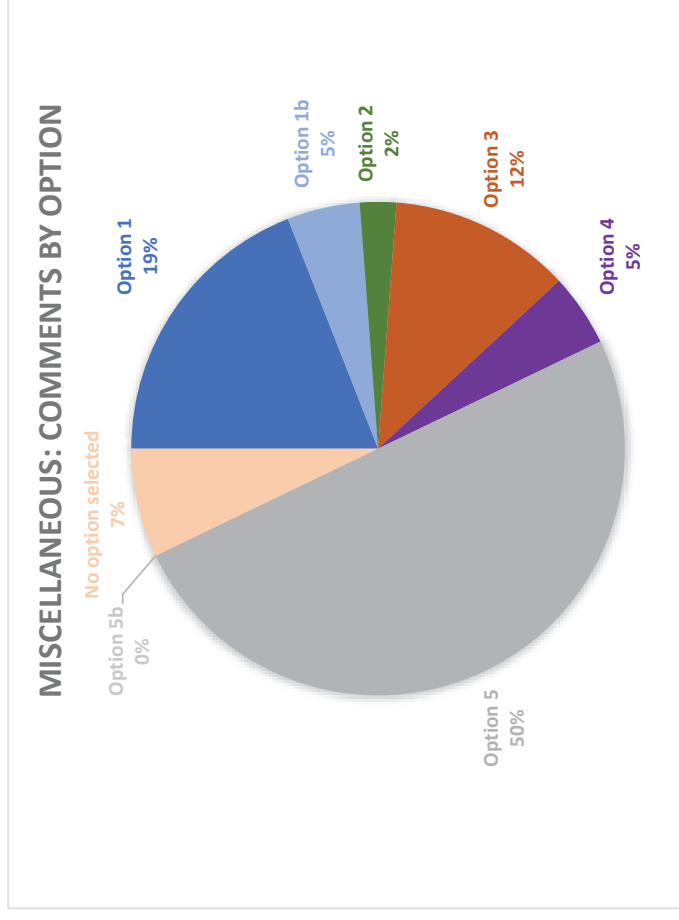




Table 17: Miscellaneous

Miscellaneous	No of comments per option	Response numbers of those that commented about this issue	Council response
<p>Sample questions/issues raised:</p> <ol style="list-style-type: none"> <li>Why has it taken so long to fix this issue?</li> <li>What is being done to manage parking?</li> <li>Why did Council present such complex options when the average ratepayer does not have the expertise to make an accurate assessment?</li> </ol>	Option 1 10 / 208	S33, S58/S208, S98/S201, S117/S148, S127, S132, S158, S178, S532	<p>Over a period of several years, TfNSW and Council have investigated flooding along the Parkway. Investigations were conducted in phases with the initial data collection taking place over 2017 to 2018 and further detailed assessments happening in 2019.</p> <p>Parking and other issues raised under this theme will be addresses in future stages of planning, should the project be approved to proceed to next steps.</p> <p>The options presented as part of the consultation process, were the options identified in the feasibility study. While we appreciate that the information is complex, we wanted to ensure our community were involved along the whole journey. The information was made as accessible as possible.</p>
	Option 2 1 / 9	S210	
	Option 3 5 / 25	S219, S221, S222, S226, S229	
	Option 4 2 / 13	S243, S246	
	Option 5 21 / 236	S264, S281, S285, S293, S355, S356, S358, S372, S374, S388, S390, S442, S443, S445, S451, S456, S468, S469, S471, S478, S486	
	No option selected 3 / 21	S514, S516, S517	

## 5 Conclusions

The community and stakeholder feedback from the public exhibition of the feasibility study revealed polarising views about flood mitigation measures proposed for the Parkway and the values placed on environmental impacts.

The flood mitigation options presented by Council attracted very mixed responses. Over 70 percent of the responses indicated support (to some degree) for improving the existing flooding conditions.

Just under a quarter of the respondents do not want Council to do anything to the Parkway, believing the value and protection of the environment is paramount and far outweighs the inconvenience of a few annual road closures.

We learned that over a third of respondents want at least a 1 in 2 year flood protection, and believe it is vital to keep this major link road accessible as much as possible. This group recognises there will be some environmental impact and while concerned, felt that maintaining road access was a critical priority, and that environmental rehabilitation would be expected as part of the works.

Another third of the responses expressed that nothing less than permanent access is acceptable, suggesting only major road upgrades as a minimum (including bridges or road elevations in relevant flood areas) be undertaken. There are no future plans that Council is aware of, for the state government to do major infrastructure improvements to the Parkway so whether any of those who wanted major road upgrades would tolerate a 1 in 2 year flood protection option, if they knew this was the best immediate option available, could not be determined from the feedback.

We also learned that many of these responses felt that raising the road height would have a less environmental impact over the longer term, which is an unlikely outcome as any major road changes or construction like this would likely cause much greater environmental impact.

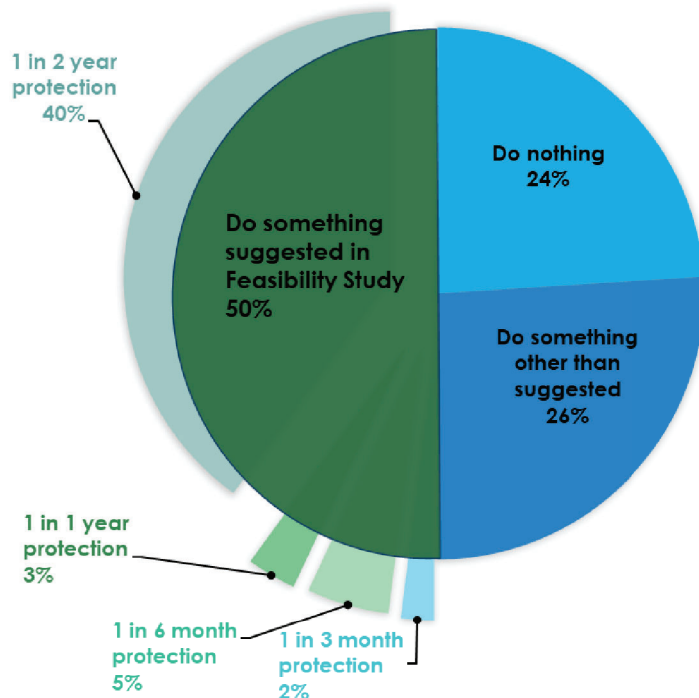
While this study found that the majority of respondents support improving current flood impacts along the Parkway, it revealed very mixed perceptions and assumptions about environmental impacts. This was the single biggest polarising issue, and further engagement and technical studies would be needed to provide stronger evidence to support a preferred option going forward.

With over 70 percent of responses wanting a solution that fixes the flooding issues either permanently, or for the longest possible/available option permitted, and 24 percent opposed, Council should consider implementing a robust engagement process that can address the key issues raised by the study. Such an engagement program must be accessible and transparent, providing an opportunity for people to be heard, and an opportunity to acknowledge others' views.

The respondents option preferences can be simplified into three main groups:

- Do nothing
- Do something other than suggested (not an option presented in the Feasibility Study)
- Do something suggested in the Feasibility Study

Figure 28 Option Preference



### Do nothing - 24 percent

24 percent chose “Do-Nothing”. This is the 23 percent who specifically chose Option 1 Do Nothing, and the four respondents (one percent) who inferred do nothing in their written response (without selecting an option). Do nothing was chosen because they care very much about the environment and are concerned that impacts of any flood mitigation measures may have irreversible an unacceptable impact.

We could assume that this is a fixed view and unlikely to change but if, for example, Council could demonstrate a way to reduce environmental damage then they may possibly be more prepared to tolerate the project in some form.

### Do something other than suggested (implying major infrastructure upgrades) - 26 percent

26 percent (sourced from option 1b, option 5b and written responses) of respondents wanted options that provide permanent access along the Parkway and none of the options presented in the study provided this. It is not known whether there is any appetite for a compromise from this group for option 5, particularly if this group can acknowledge that significant road upgrades are unlikely.

Given the number of responses from this group (sourced from option 1b, option 5b and no option), Council will need to engage with this group to:

- provide greater explanation around the significant environmental impact caused by the footprint of major infrastructure projects (that is, impacts will be much greater than the options presented in the feasibility study).

- explain that major road upgrades are unlikely
- identify the level of support for a more achievable solution, and if so, what would that look like to them (that is, perhaps option 5 or a future new version may appeal).

**Do something suggested (options 2,3,4 and 5) - 50 percent**

50 percent of the respondents wanted one of the suggested options for flood mitigation works. Respondents in this group considered flood mitigation works were needed, and those who chose option 5, felt they were needed urgently.

## Appendix A Verbatim community and stakeholder responses\*

Table 18: Flooding – state owned Infrastructure issues - verbatim comments

Sub no	Option selected	Verbatim comments – state owned Infrastructure issues
S4	O1	<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.</p> <p>* 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.</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>
S8	O1	<p>* 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>* 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>* 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>
S10	O1	<p>* 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>* 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>* 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>
S15	O1	* Fix/elevate the road properly and leave the floodplain alone
S16	O1	* To really fix the problem the road level would need to be raised about 1 metre.
S35	O1	*The road could be developed to include some raised areas in the most flood prone parts.
S36	O1	* 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	O1	* 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.
S38	O1	* 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.
S40	O1	* Need to invest in a proper works plan building bridges at critical flood points and provide wildlife tunnels to preserve the environment.

\*Personal details have been redacted where possible. Spelling and grammatical errors have been amended only where misinterpretation or offence may be caused.

Sub no	Option selected	Verbatim comments – state owned Infrastructure issues
		<p>* Fix the Road!</p> <p>* I choose option 1 or effectively no options primarily because the Council does not have the power to work on this road. It is a STATE road and work should be funded and undertaken by the State.</p> <p>The Northern Beaches Council has offered solutions that involve using the surrounding bushland. The RMS is responsible for fixing the road itself. It is the road that needs to be modified. Not the surrounding environment. See next point.</p> <p>I saw a proposal to change the classification of the land around the Parkway from community use to operational. After consulting with a few people this sounds like a move to start developing the land for housing/council purposes. This proposal has now disappeared from your website. Makes me question the transparency of your intentions.</p> <p>There is no discussion of other solutions/options to the flooding issues - such as raising the road or building bridges at critical flooding points.\</p> <p>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>
S44	O1	<p>* 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 of infrastructure around the country.</p> <p>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.</p>
S46	O1	<p>* Use this road on daily commute (have done for 20 years) Impacted a handful of times</p> <p>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>
S51	O1	<p>* My suggestion is to increase the road height in areas that are affected by flooding.</p>
S52 / S377	O1	<p>* It should be flood protected to at least a 1 in 20 year flood closure. With minimum impact to the local environment (flora, fauna an silt removal), the Parkway's low flood prone sections should be constructed to a low level, simple span, suspended floodway design.</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 that '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?</p>
S54	O1	<p>* 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.</p>
S55	O1	<p>* An alternative, minimal environmental impact solution would be to integrate into the roadway a low level (say 60cm at highest point above road) steel bridge over the flood zone so that floodwaters can run underneath .</p> <p>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.</p> <p>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	O1	<p>* 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> <p>* 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</p>

Sub no	Option selected	Verbatim comments – state owned Infrastructure issues
		flooding. It is the road that needs to be modified not the surrounding environment. * 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. * FIX THE ROAD, DO NOT DESTROY MORE OF THE ENVIRONMENT
S57	O1	* 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. If you have any vision make it dual carriage way with 1 lane extra each side for emergency vehicles or a BLine style of transit which meets the NB Tunnel straight into town.. Come on - in 1942 Bradham drew this out and it hardly a new idea..
S59	O1	* The 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.
S61	O1	* 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.
S62	O1	* 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. * 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. * 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.
S64	O1	* 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. * 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. * 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.
S68	O1	* The 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.
S69	O1	* Why don't you simply elevate the road in the required sections. Doesn't upset wildlife and minimal damage to flora.
S71	O1	* 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 .



Sub no	Option selected	Verbatim comments – state owned Infrastructure issues
S81	O1	* 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	O1	* The widening of Mona Vale Rd will provide adequate traffic flow. * Further, the extensive road works being undertaken and recently completed in the Northern Beaches are overwhelming.
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	* 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.
S89	O1	* The 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? * 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. 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. So by using basically free fill, over a few years, the whole of The Parkway can be easily made flood proof and a two up and two down roadway.
S90	O1	* 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.
S96	O1	* It is not clear why works to the 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.
S103	O1	* I feel that despite Council protestations, the 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.
S104	O1	* Doesn't really seem much point as the road is sure to be widened in the future impacting native flora and fauna anyway.
S106	O1	* 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.
S109	O1	* 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.

Sub no	Option selected	Verbatim comments – state owned Infrastructure issues
S110	O1	<p>* Subject to working through the complexities associated with the staging of construction and maintaining traffic movement, the opportunity to upgrade the 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 popular Narrabeen Lagoon Trail network.</p>
S114	O1	<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>
S119 / S526	O1	<p>* Why hasn't a 4 lane 'flyover' for 1 km from the entrance of the sports academy been considered?</p> <p>Little environmental impact and probably cost effective</p> <p>* Put a 4 lane flyover over most of it. Minimal environmental impact and eliminates the flooding problem.</p>
S123	O1	<p>* This will likely require several elevated sections of roadway (essentially long bridges) to allow floodwater and animals to cross safely underneath.</p> <p>This will no doubt cost more than has been budgeted, but we need a proper fix for this road.</p>
S124	O1	<p>* 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.</p>
S126	O1	<p>* Access to the Northern Beaches Hospital by floodproofing the 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.</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>
S137	O1	<p>* Consider a more environmentally friendly option such as elevating the road.</p>
S139	O1	<p>* Improve the existing roads, Pittwater Rd leading to Warringah Road and Forrest Way.</p>
S145	O1	<p>* 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>* It is the road that needs to be modified not the surrounding environment.</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.</p>
S150	O1	<p>* 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.</p>
S151	O1	<p>* The road is a State government problem. The options should include elevated roadways and bridges in the flood prone areas.</p>
S154	O1	<p>* I don't see why you cannot 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.</p> <p>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?</p> <p>By altering waterways to the degree in the plans it seems you may alleviate one problem to cause another down the track.</p>

Sub no	Option selected	Verbatim comments – state owned Infrastructure issues
S155	O1	<p>* In the affected flooding areas would it not be more feasible to build a bridge and drive over it, allowing a wildlife underpass and not disturb native vegetation?</p> <p>The environmental impact of the Mona Vale Road expansion has already had grave consequences for the local area. We must create environmentally friendly roads and transport infrastructure for humans, native fauna and flora. The three are not mutually exclusive. We are at a cross-road in our own human evolution. To be the causation of one more extinct species may be the beginning of the end for our own survival. If you think we are being dramatic, just the removal of wolves at Yellowstone in the USA so adversely affected the biodiversity, it physically changed rivers and streams years later. Even with their reintroduction, it may be unlikely the damage can be fully repaired.</p>
S157	O1	<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> <p>* 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> <p>* 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>* 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>
S159	O1	<p>* The obvious way to mitigate flooding is to elevate the road, which would allow for movement of water and animals below the road. Roadkill would also be minimised. Is this far too expensive?</p>
S169	O1	<p>* 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.</p>
S171	O1	<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>
S173	O1	<p>* The money can be found to elevate the road and build bridges.</p>
S175 / S508	O1	<p>* It is not the surrounding area that needs to be modified it is the 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>* 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>
S180	O1	<p>* Put the road on a raised bridge.</p>
S182	O1	<p>* Why not just raise the road level.???</p>
S183	O1	<p>* JUST RAISE THE ROAD PAVEMENT IN THE AREA WHERE THE EXISTING FLOODING OCCURS.</p>
S185	O1	<p>* Instead improve other traffic corridors so they cope with increased traffic during flood closures of The Parkway.</p>
S191	O1	<p>* Can we please have a raised roadway here. It is done in other environmentally sensitive sites, around this state and in others.</p> <p>* This is not in the option list.</p> <p>* Allowing animals to cross under the roadway is preferable and safer for drivers.</p> <p>* Forget your culverts and embankments and put the roadway up above ground level.</p>
S194	O1	<p>* I was hoping a raised road with less impact was possible for the bends</p>
S195 / S505	O1	<p>* The best permanent solution would be to elevate the road over flooded sections allowing native animals to pass underneath when dry.</p> <p>* The best solution would be to elevate the road over flooded sections allowing native animals to pass underneath when dry.</p>

Sub no	Option selected	Verbatim comments – state owned Infrastructure issues
S200	O1	* 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.
S532	O1	* 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. 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.
S206	O2	* PLEASE NOTE: One of the key issues of concern to the community is the timely reopening of the Parkway after flooding. It seems to take many hours after the flooding has abated. It would be appropriate if the Council and the NSW Government reviewed the current arrangements to ensure it is re-opened in a more timely manner.
S216	O3	* In the not too distant futures, the 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.
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.
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.
S223	O3	* 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/
S224	O3	* The Parkway should be widened * Morgan Road causeway should not be altered. Traffic was not intended to use this access way.
S241	O4	* the 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. * 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.
S242	O4	* is there any way the road can be raised over the current road so that animals, flood water can pass underneath?
S248	O4	* We also need to address a dual lane road

Sub no	Option selected	Verbatim comments – state owned Infrastructure issues
S253	O4	* 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.
S255	O5	* I prefer bridging the flooded sections of the Parkway and submit the attached report.
S258	O5	* 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.
S261	O5	* the 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	O5	* 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 Parkway is a dangerous road that has not been upgraded since it was built.
S263	O5	* 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
S266	O5	* 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).
S271	O5	*Any way to raise the road level?
S283	O5	* 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.
S284	O5	* 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.
S287	O5	* 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 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.

Sub no	Option selected	Verbatim comments – state owned Infrastructure issues
S289 / S426	O5	<p>* The Feasibility Study is very extensive &amp; 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 &amp; provide a wildlife corridor?</p> <p>* I cannot see that the study includes looking at building a bridge where Oxford Falls road west meets The Parkway? I believe this is needed as part of the flooding problem.</p> <p>* 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 &amp; above flood prone areas.</p>
S291 / S381	O5	<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>
S292	O5	<p>* Civil engineers and anyone who has been impacted by the two lane The 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 The 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.</p> <p>I previously submitted to you the estimated costs for five kilometres of two lane steel viaducts back in 2015.</p>
S294	O5	<p>* 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.</p> <p>* 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.</p>
S295	O5	<p>* Consideration should be given to raising the Parkway following this project.</p>
S303	O5	<p>* drainage improvement is good but really need to raise the section of road that is flood prone by a metre</p>
S308 / S434	O5	<p>* Please make the parkway 4 lanes, two each way, raised, as proposed in the original plans at INBH planning stage</p> <p>* Also widen the entire road to four lanes dual carriageway.</p>
S309	O5	<p>* The parkway needs to be widened to 2 lanes each way.</p> <p>* 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>
S311	O5	<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")</p>
S316	O5	<p>* Best option would be an elevated dual carriageway from Oxford Falls to around Deep Creek with dual carriageway was back to the lights to Narrabeen.</p>
S320	O5	<p>* 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.</p>
S336	O5	<p>* Its a real failure to have provided a road that floods quite often.</p> <p>* My option would be to raise the road in the areas that flood but option 5 seems reasonable.</p>
S347	O5	<p>* Ensure what ever new flood mitigation works are done are suitable for the future increase to two lanes in both directions.</p>
S352	O5	<p>* The rd should be upgraded to 4 lanes before the Beaches Tunnel construction begins</p>



Sub no	Option selected	Verbatim comments – state owned Infrastructure issues
S353 / S391	O5	<p>* I think our roads need to be updated ASAP</p> <p>* 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</p>
S356	O5	<p>*I support the most expensive options. 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"> <li>• the turn into Deep Creek Reserve for Southbound traffic</li> <li>• the turn into Oxford Falls Road for Southbound traffic</li> <li>• the turn into Middle Creek Reserve for Northbound traffic</li> <li>• the turn into Bilarong Reserve for Northbound traffic</li> </ul> <p>All of the above need local road widening to allow for a right turning lane. 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. I'm amazed that the Parkway attracts so little capital expenditure – it really is a local disgrace.</p>
S365	O5	* I also think Wakehurst should be made wider or at minimum passing lanes need to be added.
S366	O5	* I think this is the minimum action. Really the road requires raising and dual carriageway.
S369	O5	* While doing this work, is it also planned to widen the road to two lanes each way?
S371	O5	* The use of bridges and building up the road with adequate guttering would be a far better long term solution.
S375	O5	* 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
S386	O5	* 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.
S388	O5	* Also while there are disruptions to fix the flooding issue why don't you expand the road & make it 2 lanes !!
S392	O5	* 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.
S396	O5	* We need to have a permanent solution as well as options for widening it in the future.
S400	O5	* Road needs to be widened and where possible raised
S404	O5	* Road should have been raised on stilts when built to allow water & wildlife to move underneath.
S409	O5	<p>* 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!!</p> <p>Why are no bridges or raising the road included in the options?</p> <p>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.</p>



Sub no	Option selected	Verbatim comments – state owned Infrastructure issues
S411	O5	* Option 5 is clearly the preferred Option however: - any planning for the works must anticipate that the Parkway will be widened to a dual carriageway to service the Northern Beaches tunnel; and - 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.
S416	O5	* 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 occasions only increases the cost of doing the necessary works.
S422	O5	* Further to adopting option 5 the Parkway needs to be increased from a 2 lane to a 4 lane road as quickly as possible.
S423	O5	* Where is the option for an elevated bridge from oxford falls to narrabeen.
S428	O5	* 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.
S432	O5	* my view is that the road should be raised with the appropriate drainage with the least destruction to the native animals & foliage
S435	O5	* 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.
S439	O5	* Rain events are increasing therefore the road should be lifted above flood level.
S452	O5	* what about installing a huge underground pipe in the section that floods
S463	O5	* In addition it is no good having a road that is continually needing repairs and the potholes at present 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.
S485	O5	* Need road widening to 4 lanes as well
S494	O5	* It should be 4 lanes as well
S499	O5	* 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 The Parkway has not been widened.
S501	O5	* Road safety is also an essential consideration.
S503	No selection	* The proposals should be that the RMS builds proposed levees or bridges on the road reserve, not Northern Beaches Council. * 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 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.
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. For example: raising the road and constructing bridges that would allow animals to move safely under them

Sub no	Option selected	Verbatim comments – state owned Infrastructure issues
S509	No selection	* How about just raising the road.
S510	No selection	<p>* 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.</p> <p>* 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>* 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 merely the surrounding environment.</p>
S511	No selection	* The NSW Govt needs to 'fix' the flooding issues of The 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. 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.
S513	No Selection	<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>
S514	No selection	<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 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. Yet that road currently floods up to seven times per year on average, as the 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>* Increased traffic</p> <p>Furthermore, whilst The 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>
S520	No selection	* I also don't understand why council are involved in this when it is a main road and should be a State Government
S523	No selection	<p>* 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.</p> <p>* 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>* 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>

Sub no	Option selected	Verbatim comments – state owned Infrastructure issues
S525	No selection	<p>* ROAD WIDENINGROAD 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 response 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 The 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>
S528	No selection	<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>

Table 19: Flooding - options presented not the right solution - verbatim comments

Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
S1	O1	<p>*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 .</p>
S2	O1	<p>* None of the alternatives really fix the problem.</p> <p>* The Parkway will still flood so its a waste of public money</p>
S4	O1	<p>* None of the presented proposals will prevent ALL flood events along</p> <p>* 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>
S7	O1	<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> <p>* OTHER SOLUTIONS - including road drainage should be considered regardless of monetary cost. Other costs are too high.</p>
S8	O1	<p>* 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.</p> <p>* 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> <p>* 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	O1	<p>* And for a proper alternative approach to decrease the flooding we support the following:</p> <ul style="list-style-type: none"> <li>-Ensure best data of flooding extent are accurate and continue monitoring flooding.</li> <li>-Restore degraded bushland or replant cleared land in the upper catchment eg around Oxford Falls and measure the extent of decline in flooding.</li> </ul> <p>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"> <li>- controlled measurements for flood mitigation from landrestoration.</li> <li>- community activation through involvement in many phases of the project ( weeding, planting, monitoring)</li> </ul>

Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
		<ul style="list-style-type: none"> <li>- 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)</li> <li>- restore habitat in one of our ideally suited landscapes to accommodate highest biodiversity.</li> <li>- be an inspiration and a hope for finding ways to an equitable future.</li> <li>- become a model for learning that is easily accessible.</li> </ul> <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	O1	<ul style="list-style-type: none"> <li>* 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.</li> <li>* 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.</li> <li>* 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.</li> </ul>
S11	O1	<ul style="list-style-type: none"> <li>* It seems unnecessary to implement any flood mitigation proposals outlined by 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.</li> </ul>
S12	O1	<ul style="list-style-type: none"> <li>* 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.</li> <li>* 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.</li> </ul>
S14	O1	<ul style="list-style-type: none"> <li>* None of the options are really a long term solution</li> <li>* 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</li> </ul>
S15	O1	<p>I am opposed to the proposals put forward to mitigate flooding along the Parkway because:</p> <ol style="list-style-type: none"> <li>1. there is insufficient funding to both safeguard damage to the environment. Fix/elevate the road properly and leave the floodplain alone</li> <li>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</li> </ol>
S16	O1	<ul style="list-style-type: none"> <li>* I do not like any of these proposals.</li> </ul>
S20	O1	<ul style="list-style-type: none"> <li>* None of the other options provided are sufficient to save the ecology of the area sufficiently well.</li> </ul>
S26	O1	<ul style="list-style-type: none"> <li>* We need to think smarter and deeper to these issues.</li> </ul>
S32	O1	<ul style="list-style-type: none"> <li>* None of the offered solutions provide for the environment or a proper solution to flooding</li> </ul>
S34	O1	<ul style="list-style-type: none"> <li>* Minor changes to the Oxford Falls end would be possible, but that is not an option given - so do nothing.</li> </ul>
S37	O1	<ul style="list-style-type: none"> <li>* I do not support any of the current options for reducing flooding along the 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.</li> </ul> <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	O1	<ul style="list-style-type: none"> <li>* None of these options are acceptable, so we call on you at this stage to DO NOTHING.</li> </ul>

Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
S40	O1	<p>* Options offered are sub standard and don't eradicate flooding of the Wakehurst. Cause environmental damage without the provision of a viable outcome.</p> <p>*The work required should be professionally assessed and money spent to permanently fix the road, eradicate flooding and leave the nature and wildlife alone.</p> <p>None of the presented options will prevent ALL flood events along the Parkway, particularly realising that there are more flood events each year.</p> <p>ALL the options are sub- standard and involve serious environmental damage 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). Also Possible flow on effects to the Narrabeen lagoon wetlands and the wildlife there which is not mentioned.</p> <p>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>
S44	O1	<p>* 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.</p> <p>* They are not proper options.</p> <p>* 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</p> <p>* 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.</p>
S45	O1	<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.</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>* 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.</p> <p>* 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>
S48	O1	<p>*This is not fixing the road that is the problem. It is a band aid to pacify some people.</p> <p>* 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>
S50	O1	<p>* Despite the issue of flooding on the Parkway, something which we are all familiar with, we are opposed to all of the flood mitigation proposals.</p> <p>None of the proposals "Flood Proof" the Parkway and as you state it would only be some mitigation of the worst events.</p>
S51	O1	<p>*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	O1	<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.</p> <p>* 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>* None of the above! Plan for the future! This is part of Sydney, not some backwater.</p> <p>Think of the future, think outside your elected term ..... outside the box! Much to be said!</p>
S54	O1	<p>* I do not support any of the proposed options.</p>

Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
S55	O1	* None of the proposals should be followed since only a partial resolution will be achieved at great financial and environmental cost.
S56	O1	* 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. * The flooding occurs at several different locations along the Parkway. * 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. * 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.
S57	O1	* What a crap solution - This is just a perpetuation of the past and compromises both nature and the ratepayer
S59	O1	* All of the options appear to be band aid solutions that significantly impact the surrounding bush land and do not significantly reduce flooding events
S60	O1	* 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.
S61	O1	* 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.
S62	O1	* 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. * 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. * The flooding occurs at several different locations along the Parkway. * 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.
S64	O1	* 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. * 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). * 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 Parkway needs to be closed due to flooding. * 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. * 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.
S65	O1	* I am concerned that no matter how much you spend, flooding along the Parkway will still occur.
S67	O1	* Fix the actual problem, not ruin the lagoon!
S68	O1	* I am concerned that none of these options are a permanent solution.
S69	O1	* Do none of the above.
S70	O1	* There is no guarantee that what ever options are selected it will provide long term solutions.
S71	O1	* 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 .
S74	O1	* Perhaps a survey to ratepayers of the goal of reducing or removing local government or even the state government would be valuable.



Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
S83	O1	<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>* 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>
S87	O1	<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>
S89	O1	<p>* So rather than waste money on bandaids measures now, just make a logical start right now on building the much needed infrastructure.</p> <p>* That's why I have ticked the box [Do nothing]. Don't waste money on Band-Aid measures.</p>
S91 / S379	O1	<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>* An investment of up to \$17.5M to mitigate flooding on The Parkway North is a good 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 The 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>
S96	O1	<p>* It is not clear why works to the Parkway itself being flood-proofed isn't an option.</p>
S97	O1	<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.</p>
S100	O1	<p>* Thank you for the opportunity to comment on the proposed The Parkway Flood Mitigation. The NSW Office of Sport 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</p>



Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
		objection to the proposal until the impact on the Academy of Sport is clarified and measures taken to prevent those impacts.
S105	O1	* There should be an option 6 "Floodproof" irrespective of cost. I object to the deliberate channeling of user preferences that excludes this option
S108	O1	* None of the proposed options are feasible when taking into account the impact on the environment and massive cost.
S110	O1	* Option 1 through 5 are all highly undesirable in my opinion. * 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. * It's really concerning these options have survived internal scrutiny and are now being presented to the public as the best possible options available
S116	O1	* 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
S117 / S148	O1	* 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.
S119 / S526	O1	* 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 * 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?
S123	O1	* 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? * Please do this right first time, not a quick, cheap fix that will need re-doing in 10 years.
S124	O1	* These alternatives are NOT permanent solutions.
S125	O1	* 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 * The plan needs re-thinking
S126	O1	* This community consultation process is flawed. * There is no "Other" option. None of these options are acceptable yet to submit this response I have no alternative other than choosing the option to "Do Nothing" that is not what I want. These are bandaids and environmentally destructive solutions.
S131	O1	* The current solutions put forward are not acceptable.
S145	O1	* 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 The Parkway should be a priority not used as collateral damage for a band aid solution. * 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.

Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
S147	O1	* 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.
S150	O1	* 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.
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). *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.
S154	O1	* 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.
S155	O1	* None of the above options see our letter attached. YOU ARE MISSING OTHER OPTIONS BUTTON. * Humans always reap what we sow. Use our BIG BRAINS and try again. Any loss of biodiversity is not an option anymore. The residents of the Northern Beaches deserve better. We are the lungs of Sydney's CBD, do not deplete this resource.
S157	O1	* 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. * 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. * 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.
S159	O1	* 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.
S167	O1	* 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.
S169	O1	* 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	O1	* A plan that alleviates the need for road closures due to flooding during rain events needs to be devised. The options proposed do not do that and are therefore not acceptable. Any plan, considering the negative impact of change to the environment, needs to be long term effective. * 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. 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.
S171	O1	* 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

Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
		<p>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>
S173	O1	* 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.
S174	O1	* 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	O1	* None of the proposed solutions will properly solve the flooding problem.
S180	O1	* Put the road on a raised bridge. No flood closures and the animals can cross underneath safely.
S182	O1	* Why not just raise the road level.???
S183	O1	* nONE OF THE ABOVE. JUST RAISE THE ROAD PAVEMENT IN THE AREA WHERE THE EXISTING FLOODING OCCURS. IN A SIMILAR MANNER TO SEEN ON MANY WALKING TRAILS WHERE THE WATER IS ALLOWED TO FLOW UNDER THE RAISED PLATFORM. THE PACIFIC HIGHWAY AROUND THE YAMBA AREA HAS BEEN TREATED LIKE THAT.
S184	O1	* Option 2 - 5 involve spending money with no resolution of closures (although they are diminished).
S188	O1	* The radio buttons above don't provide for all possible options so I have indicated 'Do nothing' and will detail my response here.
S191	O1	* Why are we only given cheap options? * 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	* I am curious if any other road or drainage options could be considered.
S194	O1	* My feelings are none of the options are worth the effort to cut the closures down significantly and I was hoping a raised road with less impact was possible for the bends
S195 / S505	O1	* The best permanent solution would be to elevate the road over flooded sections allowing native animals to pass underneath when dry.
S200	O1	* Do nothing until northern beaches tunnel built and include widening to four lanes with causeway over the bends section from Seaford 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.
S203	O1	<p>* With regards to the Parkway Flood Mitigation proposal, we wish to request the Council to DO NOTHING – i.e. to hold off on any development of the 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.</p> <p>* 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.</p> <p>* 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>
S205	O1	<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. 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.</p>
S530	O1	* This means that I go for the option of doing nothing at this stage until further information is available

Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
S531	O1	<p>* I wish to request the Council Do Nothing – any solution needs to fix the problem with minimal ecological disturbance.</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>
S532	O1	<p>* Council's role should be to assess the options and present the one that makes most sense for comment by ratepayers.</p> <p>I am disappointed that Council has again placed various options before ratepayers regarding flood proofing The 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.</p> <p>The current proposals only offer to reduce flooding, not eliminate it. This is completely unacceptable.</p>
S206	O2	<p>Option 1 is not supported as:</p> <p>* It is not really feasible, given The Parkway is designated as a State Road by the NSW Government (and managed by NSW Roads &amp; Maritime). It is understood that the State Government has expressed concerns about flooding closing the Parkway.</p> <p>Option 3 is not supported as:</p> <p>* \$7.0M is an excess cost to reduce the closures to 2 per year. Refer to Option 2 re other access routes.</p> <p>* There are environmental impacts on 2 plant community types that are classified as threatened i.e. the Swamp Sclerophyll Forest and Fresh Water Wetlands.</p> <p>* There is a potential impact of sediment removal on aquatic habitats.</p> <p>Option 4 is not supported due to:</p> <p>* \$13.3M is excessive and a waste of money to deliver a reduction to 1 closure per year.</p> <p>* Concerns about environmental impacts. Clearing of excessive bushland in key areas. There are 3 plant community types that are classified as threatened ecological communities i.e. the Swamp Sclerophyll Forest, the Fresh Water Wetlands, and the Swamp Oak Floodplain Forests.</p> <p>* Concerns about cultural and heritage impacts, refer to the Aboriginal Heritage Office re sites of significance.</p> <p>* Will this option affect the walkway around the lake which the Northern Beaches Council has had an invested enormously to provide and accessible and well used infrastructure asset?</p> <p>* There is a potential impact of sediment removal on aquatic habitats.</p> <p>Option 5 is not supported as:</p> <p>* \$17.5M is totally excessive and a totally unnecessary expenditure which could be more effectively used for other projects across the Northern Beaches.</p> <p>* Unacceptable and totally unnecessary environmental impact i.e. there are 4 plant communities which are classified as threatened ecological communities i.e. the Swamp Sclerophyll Forest, Fresh Water Wetlands, Swamp Oak Floodplain Forests, and Coastal Saltmarsh. The continued degradation of ecological communities in Sydney and across the Northern Beach is unacceptable.</p> <p>* Inappropriate impacts on the Academy and surrounding bushland (as outlined above). There are Aboriginal sites and related specific clays which were used for Aboriginal body painting and other traditional activities. Concerns about cultural and heritage impacts, refer to the Aboriginal Heritage Office re sites of significance.</p> <p>* There is a potential impact of sediment removal on aquatic habitats.</p> <p>* Will this option affect the walkway around the lake which the Northern Beaches Council has had an invested enormously to provide and accessible and well used infrastructure asset?</p>
S218 / S529	O3	<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>

Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
S222	O3	<p>* I would agree to option 3 with amendments. (No sediment removal)</p> <p>-Oxford Falls Road</p> <p>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 The Parkway near the school, this also affects Morgan Road.</p> <p>-“The Bends”</p> <p>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.</p>
S236	O3	<p>* 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.</p>
S242	O4	<p>* It seems as though none of the choices are optimal.</p>
S245	O4	<p>* The best option of those listed is 4 even though it includes a lot of environmental damage.</p>
S255	O5	<p>* Option 4 should be designed for future amplification if needed.</p> <p>* What is currently proposed will not alleviate flooding or closure of the Parkway and that is putting it as blunt as I can. The creation of bunds or what can only be described as large flood retention pits is a weak approach and I accuse the NSW Government and Northern Beaches Council representatives of deliberately delaying and lowering the priority for floodproofing the Parkway. The whole exercise has been nothing more than a game of blind politics with no serious effort taken to seek a real floodproofing solution.</p> <p>The same can be said about the upgrading of Mona Vale Road which was given a low priority by the former Labor NSW Government and as well as the current NSW LNP Government. It took deaths from a number of road accidents to spur on an upgrade of Mona Vale Road. That project is still lowly funded and poorly designed, with possibly another 5 years before it is completed to Terrey Hills. Will the NSW Government wait for patient deaths because of traffic/travel delays because of flooding in the Parkway North before doing something positive and more permanent in the way of floodproofing the roadway?</p> <p>* Clearly the options offered are not why I envisage as a solution to making the Parkway safe for access in periods of heavy rain and flooding. If I had no other choice but the options put forward in the study, I would have to choose the most expensive but in so doing this is also the most damaging to the existing Parkway environment but not because of the culverts proposed but rather the bunds which will result in a serious loss of vegetation.</p> <p>* How long can this political game of ignorance continue? We need a widened, upgraded and open The Parkway. The solution is obvious and that is the construction of a raised concrete bridge over the flood prone section. The engineering technology exists in the magnificent Sea Cliff Bridge at Coalcliff and more recently sections of pre-built concrete spans were used to raise the Pacific Motorway above the flood plain north of Grafton. Why cannot the Government bite the bullet and used the same construction methods to span what is possibly less than 800 metres of the Parkway in the section referred to as The Bends and if necessary, another 800 metres near the Academy of Sport although I note that this is North of the existing floodgates and flooding may not necessarily impact on the roadway at that point. This would be a permanent solution and allow the rehabilitation of the existing creek and surrounding areas. The ugly levee could be removed in the process.</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> <p>* The flooding occurs at several different locations along the Parkway. There may need to be different solutions for each location but the community needs to see better, long term options.</p>
S266	O5	<p>* 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 The Parkway from Seaforth (one exit of the tunnel) to Narrabeen would (should) be built.</p>

Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
		Why waste money on stop gap options when we should be building a new higher and wider parkway NOW.
S270	O5	*None of the Options above are satisfactory. This is a very important route and the road should be 1 in 100 year flood proof.
S275	O5	* 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.
S283	O5	* I am not convinced any of your options for the cost give long term solutions to the problem
S289 / S426	O5	* I DON'T CHOOSE ANY OF THESE OPTIONS ( but the form requires it) . These options are too shortsighted to address the issues.
S291 / S381	O5	* 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
S292	O5	* This current round of design work, public consultation and PR announcements is just fluff. Get serious!
S294	O5	* 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
S296	O5	* I think we can keep spending money on bandaid solutions or accept it is a major arterial road and treat it as such.
S304	O5	* 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.
S309	O5	* Its a ridiculous option to do anyone of the above options , spend all that money and not widen the parkway.
S318	O5	* 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.
S321	O5	* 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.
S326	O5	* Please supply plans to make the Parkway an all weather road.
S331	O5	*Need a long term final solution.  * 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. 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). 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. The Haskoning report, The Parkway Flood Mitigation Feasibility Study, part 15 "Previous Flood Mitigation Studies" makes brief mention of 2017 options investigated by Cardno that include "raising of The Parkway". Unfortunately, no mention is made of the method of raising contemplated except a reference to "environmental impacts" and the complete unavailability of



Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
		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.
S354	O5	* 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.
S360	O5	* I think their needs to be a focus on fixing the flooding issue for the long term
S371	O5	* 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. The use of bridges and building up the road with adequate guttering would be a far better long term solution. * As my feedback will not upload unless I indicate an option I have ticked 5 but do not agree.
S386	O5	* 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.
S399	O5	* 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. * A real solution may be expensive but it is the only option.
S414 / S502	O5	* 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.
S423	O5	* Why is there not a solution that has a one in 50 yr possible road closure.
S428	O5	* 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.
S435	O5	* 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.
S446	O5	* We would support the additional work needed to make the Parkway fully flood-proof.
S460	O5	* Why waste time and money that don't work. Where is option 6 - Never flood?
S465	O5	* 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.



Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
S479	O5	* In addition the State Government and NB Council are increasing the population that use The Parkway and it needs upgrading to two lanes and the flooding needs to be eliminated not just tinkered with as is proposed.
S503	No selection	* My name is *** and I am a resident of Elanora Heights. My family and I use the Parkway many times each day and we do not support any of the current proposals for reducing flooding along The 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. * The proposals are band-aid solutions.
S504	No selection	* 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.
S506	No selection	* Surely a raised roadway along the full section of road affected by flooding is the best option. Has this been seriously considered?
S507	No selection	* I am strongly opposed to all proposed options for The Parkway flood mitigation based on the following: - The 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. 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. 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.
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 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. * 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. * The flooding occurs at several different locations along the Parkway. There may need to be different solutions for each location but the community needs to see all the options. 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.

Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
S511	No selection	<p>* After attending the zoom and Tramshed plans being put forward by Council, I was rather torn by the outcomes.</p> <p>* The choice of plans outlines the fact that none will fully ensure no flooding at all.</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>
S513	No selection	<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>* 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	No selection	<p>* We must not permit damage to occur to any more sites close to road works, as has occurred with the MonaVale Road upgrade. Sea level rise projections of up to two metres by 2021 also suggest that more of the 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>* The solution</p> <p>As little as many of us want the 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>
S515	No selection	<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>
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.)</p> <p>* Inappropriate Terms of Reference for Mitigation Feasibility Study</p> <p>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>* No current option is acceptable</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</p>

Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
		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.
S518	No selection	<ul style="list-style-type: none"> <li>* An upgrade to just 1-2 year flood occurrence is not acceptable for a major road in a major First World city.</li> <li>* 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.</li> <li>* 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.</li> <li>* The curves section is 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 term 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.</li> </ul>
S520	No selection	<ul style="list-style-type: none"> <li>* Re "have your say" on The Parkway Flood Mitigation. There needs to be another option, that is to do the job properly. Raise the road above flood levels.</li> <li>All other options are half baked solutions which do not solve the flooding problem.</li> </ul>
S523	No selection	<ul style="list-style-type: none"> <li>* This is a joke, you are forcing people to make a choice between bad and worse, take Option 6 and fix it properly.</li> <li>* 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.</li> <li>* The flooding occurs at several different locations along the Parkway.</li> <li>* 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.</li> <li>* 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.</li> </ul>
S524	No selection	<ul style="list-style-type: none"> <li>* 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.</li> <li>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.</li> </ul>
S525	No selection	<ul style="list-style-type: none"> <li>* FLOOD PREVENTION</li> <li>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.</li> <li>* FLOOD MITIGATION OPTIONS</li> <li>We take the following positive reassurances from the report: -</li> <li>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</li> </ul>

Sub no	Option selected	Verbatim comments – flooding – options presented not the right solution
		<p>Parkway.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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> <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>
S527	No selection	<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>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	No selection	<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>* 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>

Table 20: Flooding - access to Northern Beaches Hospital - verbatim comments

Sub no	Option selected	Verbatim comments – flooding – access to Northern Beaches Hospital
S5	O1	* Has the council being pressured to ensure the emergency corridor to Northern Beaches Hospital is usable at all times?
S15	O1	* 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

Sub no	Option selected	Verbatim comments – flooding – access to Northern Beaches Hospital
S24	O1	* I think we should be preserving the Bush land we have and the Mona Vale Road upgrade provides alternative access.
S27	O1	*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.
S38	O1	* 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
S40	O1	* Alternative is having the State Government fund the fixing of the Parkway properly as it is a crucial link to the NB Hospital. *The road is a crucial link to the Northern Beaches Hospital, so it needs to be properly funded and fixed.
S52 / S377	O1	* 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).
S58 / S208	O1	* 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.
S60	O1	* 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 .
S70	O1	* There are other access roads not subject to flooding which will provide access to the hospital.
S71	O1	* 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
S72	O1	* 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.
S89	O1	* 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.
S90	O1	* It may be annoying in that event but there are several alternatives, even to the hospital.
S103	O1	* 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.
S107	O1	* 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.
S109	O1	* 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. The people of the Northern Beaches should be able to safely and quickly access a hospital if we need it.
S110	O1	* Local Northern Beaches residents have been waiting a very, very long time for a significant upgrade of The 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.
S112	O1	* 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.
S116	O1	* It is a state built arterial road leading to state built northern beaches hospital which northern 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.
S123	O1	* Since the NSW government closed Mona Vale hospital, The Parkway is critical for access to the Northern Beaches Hospital. Thus the NSW government must properly fix this road.

Sub no	Option selected	Verbatim comments – flooding – access to Northern Beaches Hospital
S124	O1	* Reinstatement of 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.
S126	O1	* Access to the Northern Beaches Hospital by floodproofing the 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.
S131	O1	* the 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.
S144	O1	* 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. The Parkway can become a little used road when flooded.
S149	O1	* The upgrade of Mona Vale road to dual carriageway provides a secure all weather transport corridor including a secure route to the new hospital.
S170	O1	* 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.
S191	O1	* The state govt made this worse by closing Mona vale hospital and having an inadequate road infrastructure for accessing the new hospital.
S240	O3	* 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.
S253	O4	* 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.
S255	O5	* The Northern section of the Parkway between Warringah Road and Pittwater Road is the main and shortest route to the new Northern Beaches Hospital as well as the Royal North Shore Hospital for vehicles travelling from Narrabeen and North as far as Palm Beach.
S256	O5	* The reasons are for economical, social and health reasons. (Our main hospital for the beaches is located at Northern Beaches Hospital)
S260	O5	* The Parkway is too important a route for medical and other emergency reasons to not protect it to the maximum extent from flooding.
S265	O5	* 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.
S268 / S437	O5	* Maximum remedial work desirable to optimise Northern Beaches hospital access to Northern Beaches * Secure, timely emergency hospital access for the Northern Beaches north of Narrabeen is a significant consideration for trying to keep the Parkway open
S269	O5	* Strategic route should not close due to rain.
S270	O5	* 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
S272 / S345	O5	* Want the Parkway to be open for access to Hospital at all times. * Needs to be done urgently for access to hospital. No need for extended studies.
S282	O5	* 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 Frenchs 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.
S286	O5	* The Parkway is an essential road especially for emergency access to Northern Beaches Hospital. It is vital that it be kept open.



Sub no	Option selected	Verbatim comments – flooding – access to Northern Beaches Hospital
S290 / S368	O5	* Emergency vehicles need all weather access (eg. ambulance ) * Prerequisite for Ingleside land release . New hospital should never have been approved without ensuring allweather ambulance access via the Parkway.
S297	O5	* 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 The 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.
S307	O5	*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!
S311	O5	* 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
S313	O5	* 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 The Parkway being closed it will be up to council to explain to that family why. Do it correctly the first time.
S314	O5	* 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.
S315	O5	* Given that to many The 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
S318	O5	* It is important we have access to the Hospital and ONLY three roads linking the Northern Beaches to the Suburbs.
S319	O5	* 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	O5	* 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	O5	* Council has a duty of care to supply an all weather road to the local hospital.
S322	O5	* 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	O5	* This is a major road and provides critical access for many NB residents to the hospital.
S333	O5	* 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	O5	* 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
S336	O5	* Now that the hospital is located at Frenches Forest it time to upgrade the road so it no longer floods



Sub no	Option selected	Verbatim comments – flooding – access to Northern Beaches Hospital
S337	O5	* 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. The 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 The Parkway was also closed at the time.
S338	O5	* 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.
S341	O5	* It needs to be done. We need reliable access to the hospital
S342	O5	* 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
S344	O5	* Just do it, especially with the closing of Mona Vale hospital
S348	O5	* This option will ensure that closures are kept to a minimum, allowing emergency vehicle and residents access.
S359	O5	* 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.
S361	O5	* 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.
S364	O5	* 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 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. If a council official were to time the trip from Palm Beach to the NB hospital with the 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.
S365	O5	* 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.
S371	O5	* 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.
S375	O5	* The flooding issue with The Parkway needs to be fixed once and for all, for a number of reasons, however, one major reason exists above all others Our local hospital was removed from Mona Vale and our new hospital is NBH at Frenchs Forest As an example . . . I live on The 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 >> - 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

Sub no	Option selected	Verbatim comments – flooding – access to Northern Beaches Hospital
		<p>- During main traffic / peak times, this could be 15 minutes or more to get to NBH</p> <p>- 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</p> <p>- The same or possibly more time would be taken to go via Pittwater and Warringah Road route</p> <p>- 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> <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>
S392	O5	* 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.
S395	O5	* Imagine the day when its flooded and someone passes away because they can't use the Parkway.....surely that's more important than saving a few hundred trees.
S399	O5	* Given the decision to put the near Northern Beaches Hospital where it is, it is critical that The Parkway is NEVER closed due to flooding
S401	O5	* 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 Parkway a vital lifeline for Northern Beaches residents.
S403	O5	* With the transfer of many of Mona Vale hospital's functions to Northern Beaches Hospital it's even more important that The Parkway remains open.
S407	O5	* 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.
S408	O5	* 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.
S409	O5	* Since the 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.
S410	O5	* Given that the Parkway is a major link for emergency vehicles to the Pittwater region, any effort less than maximum would potentially cost lives.
S412	O5	* 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.
S413 / S500	O5	<p>* 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. 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 Parkway &amp; with the completion of the new ambulance station at Mona Vale.</p> <p>* 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 &amp; only opened as an basic medical centre it's a matter of life &amp; death if the Parkway roadway is closed from too much rain, when there is plenty of solutions to finally fix the problem up once &amp; 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 Pittwater Rd &amp; Mona Vale Rd becomes clogged with too much</p>

Sub no	Option selected	Verbatim comments – flooding – access to Northern Beaches Hospital
		traffic which easily adds another fifteen to twenty minutes to any journey out of the northern beaches.
S415	O5	* 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.
S423	O5	* This is a major access road and provides access to the hospital.
S427	O5	* 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 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.
S440	O5	* Need to ensure road stays open to access NBH
S448	O5	* 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.
S454	O5	* Whatever it takes to fix is the best option for access to NBH and workers commute.
S457	O5	* 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.
S461	O5	* Access to the new hospital from the beaches needs to be secured. In times of emergency this road has become even more important.
S462	O5	* 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	O5	* The Parkway is a key road, which now has the added importance of being a direct route to Northern Beaches hospital.
S464	O5	* Fix it properly, its a access road to the hospital, it should never be closed
S466	O5	* Increased importance of the Parkway as a commute and access to our new hospital make this a "no brainer" for me.
S467	O5	* 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.
S474	O5	* 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.
S475	O5	* 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 disrupted and therefore unreliable – a total disgrace on government that this has continued without resolution and yet constant money spent on improvements!
S476	O5	* 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.
S479	O5	* the Parkway should be designated a major road critical to allow fast access from the Northern Beaches to the new hospital.
S484	O5	* The closure of The 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

Sub no	Option selected	Verbatim comments – flooding – access to Northern Beaches Hospital
		closed it could easily cost more than one life. The Peninsula needs better access which can be relied on.
S489	O5	* Major route to Northern Beaches Hospital so option 5 is badly needed.
S490	O5	* Go for the best. Guaranteed speedy access to the Northern Beaches Hospital is a priority for this and future generations.
S491	O5	* 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.
S493	O5	* 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	O5	* Option 5 is the only way to go, one of two south bound roads and our only Hospital and the end.
S499	O5	* With the new Northern Beaches Hospital at Frenchs Forest, surely this is a compelling case to finally widen the road.
S501	O5	* Confirm that the 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
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.
S511	No selection	* 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.
S513	No selection	* 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. Nothing less.
S514	No selection	* 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.
S525	No selection	* EMERGENCY ACCESS The northern end of the peninsula has a particular sensitivity to closures of the 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. 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, emergency access might only be disrupted for a fraction of this 48 hours.
S528	No selection	* Imperative that something is done as The 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.

Table 21: Flooding - closures acceptable - verbatim comments

Sub no	Option selected	Verbatim comments – Flooding - closures acceptable
S1	O1	* Being unable to access a road 5-7 times a year is hardly a disaster; especially as there are other roads off the peninsula.
S5	O1	* 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.) 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.
S7	O1	* Fixing the flooding will cause more damage to the natural environment - I'd rather put up wit the floods!
S29	O1	* Our members include residents from as far north as Avalon and reach down to Manly. All of our members are most familiar with the Parkway flooding situation and whilst we find it inconvenient, it is a situation we have grown to accept.
S30	O1	* You much environmental degradation and even after spending all the money it does not totally eliminate road closures.
S31	O1	*Not worth the environmental degradation. Users simply travel via alternate routes.
S41	O1	* I live in Mona Vale and commute to the city daily for work. I drive on the 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.
S47	O1	* I believe the rare closures are fine and doesn't need a massive impact
S50	O1	*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.
S60	O1	* 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.
S63	O1	* 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.
S65	O1	* And if closure because of floods is a rare inconvenience, so be it.
S72	O1	* I use the 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.
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
S74	O1	* The marginal inconvenience of The 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.
S77	O1	* 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.
S78	O1	* 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!
S80	O1	* The occasional road closures caused by flooding are only a minor irritation that is tolerable.
S81	O1	* 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.

Sub no	Option selected	Verbatim comments – Flooding - closures acceptable
S87	O1	* 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
S93	O1	* The number of closures per year, which is very low, does not justify the environmental damage to native fauna and flora.
S95	O1	* 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.
S98 / S201	O1	* A small inconvenience occasionally doesn't warrant this expense
S99	O1	* 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. It's not the only road out of the peninsular.
S102	O1	* It's closed rarely, and there are many options when it is, which don't take any longer and may be quicker.
S107	O1	* I have been a regular user of The 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.
S113	O1	* 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.
S115	O1	* It's a B road. There are alternatives. Do nothing
S121	O1	* 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.
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.
S129	O1	* Use a different route when it floods.
S130	O1	* We knew the Parkway flooded when we decided to live on the beaches. Stopping the flooding will impact the bush negatively and there are alternative routes for residents when needed.
S132	O1	* 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).
S134	O1	* 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.
S139	O1	* 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.
S141	O1	* Have lived in Avalon for 40 years and never found the closures to be anything but an inconvenience.
S143	O1	* It rarely floods and there are alternatives when it does.
S149	O1	* As a daily user of the 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.
S156	O1	* Additionally, people do accept the flooding as a consequences of their choice to live in such a beautiful and natural part of Sydney.
S160	O1	* I think the reduction in days closed aren't worth the environmental damage. Especially as there are other alternative routes.
S161	O1	* 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. * Potentially spending \$17.5 million on something that occasionally causes a minor inconvenience a couple of times a year is a waste of money.



Sub no	Option selected	Verbatim comments – Flooding - closures acceptable
S162	O1	* For the amount of days per year the Parkway floods, taking such drastic action is incomprehensible. Do nothing.
S178	O1	* 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 THE PARKWAY IN HEAVY RAIN THAN HAVE THE WHOLE AREA TRASHED FOR A BENEFIT THAT IS LESS THAN 100% EFFECTIVE.
S184	O1	* Disruption to community is minimal with 5 -6 closures a year.
S186	O1	* Not worth impacting the environment for inconvenience of 6-7 floods per year
S197	O1	* Closing approx 6 times a year is a small price to pay.
S203	O1	* TRAFFIC OBSTRUCTIONS CURING CONSTRUCTION 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.
S204	O1	* 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.
S205	O1	* Duration vs Frequency During 2007 and 2014 The 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.” 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. 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 The Parkway is closed is comparatively small.
S521	O1	* Do Nothing Option 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 Seaford residents or travellers from suburbs south of Seaford via the Spit Bridge taking the alternative via Dee Why. Naturally the same applies for southbound journeys.
S211	O2	* 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
S212	O2	* 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	O2	* I have no issue managing 4 closures per year in order to protect the native wildlife and the vegetation.
S214	O2	* The disruption to through traffic in the other options to B1 is greater than the inconvenience caused through flooding. the additional cost is also significant for the small benefits achieved.
S215	O2	* 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.
S217	O3	* 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.
S224	O3	* Traffic should take the Frenchs Forest route when flooding occurs.
S227	O3	* People just have to get used to driving the long way round twice a year.
S228	O3	* Many roads flood from time to time. Road closure warnings / road conditions advice is well managed these days.



Sub no	Option selected	Verbatim comments – Flooding - closures acceptable
S231	O3	* 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
S254	O4	* Surely 2 closures a year would be manageable?
S298	O5	* 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.
S511	No selection	* 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.)

Table 22: Environment - sedimentation - verbatim comments

Sub no	Option selected	Verbatim comments – environment - sedimentation
S37	O1	* 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 Parkway.
S110	O1	* 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.
S150	O1	* The road itself needs to be raised in flood zone areas, digging up sediment and existing eco systems may cause more damage long term.
S188	O1	* 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 processes will give you the same result as proposed by other options involving more significant disturbance and cost.
S205	O1	<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>* Extent of Sediment Removal</p> <p>“The Bends Culvert ‘sediment removal option’ has the greatest impact to biodiversity. 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>* 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>* Catchment management-based options include creek restoration to minimise sediment generation</p>

Sub no	Option selected	Verbatim comments – environment - sedimentation
S521	O1	<p>* Ecological impact</p> <p>Documented impacts provided by the draft The Parkway Flood Mitigation Feasibility Study clearly identify environmental impacts to aquatic communities from any intervention to remove sediment.</p>
S220	O3	<p>* Similar to the Lagoon Plan, the flooding concerns on The Parkway are dependent on the depth of the lagoon.</p> <p>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.</p> <p>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 &amp; South Narrabeen beaches, it is a win win for the beach and lagoon residents and will reduce the amount of The Parkway closures</p>
S231	O3	<p>* Upgrading culverts and clearing sediment downstream of culverts and upstream of the bends would significantly reduce the impact of flooding.</p> <p>* 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>
S252	O4	<p>* Sediment removal &amp; 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.</p> <p>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 The Parkway. If anyone has paddled Middle Creek from the eastern end they would find much of it has been obstructed by fallen trees &amp; 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.</p>
S255	O5	<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 Parkway.</p>
S267	O5	<p>* 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</p>
S292	O5	<p>* (Are you ever going to dredge the silt out of the Lakes?).</p>
S357	O5	<p>* 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.</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>
S414 / S502	O5	<p>* Since the 1950s when The Parkway did not flood, Middle Creek has become clogged with silt and vegetation. Simply restore it to the state it was then.</p>
S525	No option selected	<p>We take the following positive reassurances from the report: -</p> <p>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</p>

Sub no	Option selected	Verbatim comments – environment - sedimentation
		<p>on the Parkway. The failure to remove the sediment could also lead to further sedimentation in the future.</p> <p>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.</p> <p>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.</p>

Table 23: Environment - biodiversity verbatim comments

Sub no	Option selected	Verbatim comments – environment - biodiversity
S1	O1	<p>* The value of biodiversity 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.</p>
S4	O1	<p>ALL of these proposals involve serious environmental disturbance including</p> <p>* 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.</p> <p>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>
S5	O1	<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>
S6	O1	<p>* I thoroughly disagree with any possible degradation of the beautiful bush land and riparian environments surrounding the 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>
S8	O1	<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>
S9	O1	<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>* We all love the natural feeling of the Parkway and know about the rich biodiversity of endemic flora and fauna, endangered ecological communities and the less welcome weeds in certain areas.</p>

Sub no	Option selected	Verbatim comments – environment - biodiversity
S10	O1	<p>* ALL of these proposals involve serious environmental disturbance including 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.</p> <p>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>
S13	O1	<p>* Let's keep The 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> <p>* Let's keep The 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>
S17	O1	<p>*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 over the environmental destruction that would take place with these flood mitigation measures put into action.</p> <p>* We do not need more environmental damage alongside the Parkway. If this preferred plan occurs it would be disastrous for the surrounding ecosystems, where threatened species such as Prostanthera marifolia inhabit.</p>
S21	O1	<p>* The 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.</p> <p>The current major upgrades to Mona Vale Road are more than enough to allow traffic to flow from the peninsula and back.</p>
S22	O1	<p>* 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.</p> <p>And as per the outline - all Options (2-5) have similar negative ecological impacts.</p>
S25	O1	<p>* 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.</p>
S26	O1	<p>* 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 Parkway. A review of the reduction in natural spaces within Warringah will show you that we are fast losing habitat and flora diversity.</p> <p>* Attacking and upsetting amazing biodiversity in plants and animals is certainly not the answer.</p>
S27	O1	<p>* the 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.</p> <p>* 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.</p>
S28	O1	<p>* The current floodplain is unique and provides many possibilities for biodiversity and enhancement of the local bush land for plants and animals.</p>

Sub no	Option selected	Verbatim comments – environment - biodiversity
S29	O1	<p>* We all love the natural feeling of the 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>* 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>
S35	O1	<p>* The bushland is vital to maintaining the biodiversity of the local area. It is important we consider conserving the bushland where possible</p>
S37	O1	<p>Initial road works on the 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>
S38	O1	<p>* 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.</p> <p>* 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>
S39	O1	I don't want to destroy ONE OF THE ONLY NATIVE WETLANDS IN THE AREA !!!
S40	O1	WHAT ABOUT THE WILDLIFE ??
S45	O1	<p>Horrendous to propose the eradication of so much bushland.</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</p>