

# Engagement outcomes data report

Phase 2: Wamberal Beach  
terminal protection and sand  
nourishment consultation

Central Coast Council

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Mara Consulting

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Creating vibrant communities through powerful conversations



## CONTENTS

<b>Introduction</b> .....	<b>5</b>
<b>Interpreting online survey results</b> .....	<b>6</b>
Results presentation .....	6
Mean scores.....	6
Interpretation.....	7
Open ended comments .....	7
<b>Survey results</b> .....	<b>8</b>
Value .....	8
Visitation .....	9
Solution framing .....	12
Responsibility.....	14
Information and Knowledge .....	16
Additional comments or questions .....	18
Demographics .....	19
<b>Social Pinpoint</b> .....	<b>24</b>
Wamberal Beach existing environment .....	24
Option 1: Rock Buffer with basalt .....	25
Option 2: Rock Buffer with sandstone .....	26
Option 3: Vertical Wall with rock toe .....	27
Option 4: Vertical Wall without rock toe .....	28
Option 5: Tiered Wall with promenade .....	29
<b>Appendix A – Verbatim responses to open ended questions</b> .....	<b>31</b>
Survey (Q19) responses.....	31
Social PinPoint - Individual concept design verbatim responses.....	48
<b>Appendix B – Verbatim questions submitted upon registration for the online Community Information Sessions</b> .....	<b>67</b>



## LIST OF TABLES

Table 1: Likert scales.....	6
Table 2: Mean score calculation .....	6
Table 3: Wamberal Beach value .....	8
Table 4: Importance of outcomes .....	9
Table 5: Existing visitation .....	9
Table 6: Purpose of visit .....	10
Table 7: Future visitation with seawall option providing community amenity .....	11
Table 8: Wamberal Beach social value.....	11
Table 9: Most important factor when visiting .....	12
Table 10: Solution frame .....	12
Table 11: Ranking considerations to assist in finding a solution .....	13
Table 12: Ranking the importance of sand nourishment .....	13
Table 13: Ranking cost and durability considerations .....	13
Table 14: Sand nourishment and seawall design.....	14
Table 15: Funding agreement .....	14
Table 16: Responsibility – seawall construction .....	14
Table 17: Responsibility – seawall maintenance.....	15
Table 18: Responsibility – sand nourishment.....	16
Table 19: Information sources.....	16
Table 20: Coastal hazards – community understanding .....	17
Table 21: Additional comments .....	18
Table 22: Suburb of residence.....	19
Table 23: Gender .....	20
Table 24: Age.....	20
Table 25: Aboriginal and/or Torres Strait Islander origin.....	21
Table 26: Reason for interest in the survey.....	21



Table 27: Respondents residential distance from Wamberal Beach .....	22
Table 28: Where respondents heard about the survey .....	22
Table 29: Supportive and unsupportive comments for the existing environment at Wamberal Beach .....	24
Table 30: Supportive and unsupportive comments for Option 1 .....	25
Table 31: Supportive and unsupportive comments for Option 2 .....	26
Table 32: Supportive and unsupportive comments for Option 3 .....	27
Table 33: Supportive and unsupportive comments for Option 4 .....	28
Table 34: Supportive and unsupportive comments for Option 5 .....	29
Table 35: Further comments or questions in relation to Wamberal Beach. Unedited list. ....	31
Table 36: SPP – Wamberal Beach existing environment. Unedited list.....	48
Table 37: SPP – Option 1: Rock Buffer revetment using basalt. Unedited list. ....	53
Table 38: SPP – Option 2: Rock Buffer revetement using sandstone. Unedited list. ....	56
Table 39: SPP – Option 3: Vertical Wall with rock toe. Unedited list. ....	58
Table 40: SPP – Option 4: Vertical Wall without rock toe. Unedited list .....	60
Table 41: SPP – Option 5: Tiered Wall with promenade. Unedited list. ....	61
Table 42: Pre-submitted Questions –Online Information Sessions. Unedited list. ....	67



## Introduction

This Data Report provides the raw data and interpretation of results for phase 2 Wamberal Beach terminal protection and sand nourishment consultation. This includes the results of the online survey, Social PinPoint (SPP) feedback received for the 5 concept design renders and questions submitted upon registration to the online community information sessions.

Please note that this phase 2 Data Report is to be read alongside the phase 2 Engagement Outcomes Summary Report, a separate document that provides analysis and interprets the data gathered during the consultation.



## Interpreting online survey results

### Results presentation

In the survey respondents were presented with five-point Likert scales for assessment of level of agreement and satisfaction with various statements, and an assessment of service provision in comparison with other cemeteries. Respondents could provide a response of don't know if they could not rate a statement.

The scales were constructed as follows:

*Table 1: Likert scales*

Importance	Support
1=Not important	1=Not at all supportive
2=Slightly important	2=Not very supportive
3=Moderately important	3=Neutral
4=Very important	4=Somewhat supportive
5=Extremely important	5=Very supportive

### Mean scores

The numeric values from the scales (1 to 5) were converted to an overall average (mean) score. This scale is calculated only for those who responded using the 1 to 5 scale - it does not include non-scale responses. An example of the calculation of a satisfaction score follows. All scales outlined above follow the same method for calculating mean scores.

*Table 2: Mean score calculation*

Response Scale	Number of responses	Response scale x number of responses	Score
1=Not important	30	1x30	The score is calculated by dividing 1,470 by the number of responses uses (420 in this case): 1,470/420
2=Slightly important	60	2x60	
3=Moderately important	80	3x80	
4=Very important	170	4x170	
5=Extremely important	80	5x80	
Don't know/NA	80	Not included in calculation	Score = 3.5
Total	500	1,470	



To obtain a score of 5.0 ALL respondents who gave a rating would need to have answered '5', i.e. answered extremely important. Therefore, a higher rating represents a relatively more favourable response. A score of 3 out of 5 suggests a neutral opinion, ie. no strong feelings either way.

## Interpretation

In interpreting the scores, it should be remembered that:

- The higher the score, the higher the level of agreement etc.
- An agreement score of greater than 3 indicates that, on balance, residents agreed with the statement.

When interpreting the results, the distribution of ratings and the score need to be considered together, not individually. For example, ratings which are evenly spread over the 1 to 5 scale may yield the same mean score as those which are relatively polarised at either end of the scale. The implications for these contrasting distributions are very different, despite the fact that they received the same score.

## Open ended comments

Some questions allowed for participants to type in their responses rather than select from a list. In cases where more than 20 responses of this nature were obtained, they were coded into like themes for ease of interpretation. A full verbatim list of survey responses is provided in **Appendix A**.



## Survey results

A total of 286 people participated in the survey.

The survey questions were designed to elicit participants' views on the idea of a seawall solution for Wamberal Beach and identify what they value about the current beach environment and what they would value in a preferred seawall design.

### Value

Respondents were asked what they **value most about Wamberal Beach** in an open ended question. The dominant response (95) suggested that recreation including surfing, swimming and walking were the most valued about the beach. As this was an open ended question, the answers have been coded to group like responses. Results are shown in the table below. A full verbatim list of all responses is provided in **Appendix A**.

*Table 3: Wamberal Beach value*

Value	N
Recreation/amenity, includes: Surfing/swimming 29 Walking/running 25 Walking dog 8 Relaxation 7 Healthy lifestyle 6	95
Beach/long, wide stretch of beach/open space	73
Nature/natural beach front/natural environment	60
Aesthetics of the beach/views/beauty	59
Sand/clean sand	51
Easy public access/access at all tide levels	41
Waves/surf/ocean	34
Crystal clear water/clean water	15
Walking connection/links to Terrigal, Spoon Bay and the lagoons	12
Access to the beach from my property	11
A place for family and community gatherings/activities	10
Uncrowded/undeveloped	8
Tranquility, freedom, peace, quiet	8
Protecting homes, infrastructure and safety	8
Public safety	7
Holidays/fun/pleasure	7
The whole place/everything about it	4
Skipped	11





The numbers in brackets provided in the below paragraphs indicate the level of agreement using the Likert Scale. The Likert Scale rating is used to measure the amount of value placed on each of the design elements presented. A number of 3 or greater than 3 suggests overall agreement with the statement. A number less than 3 indicates overall disagreement with the statement.

When asked how much respondents agree or disagree with statements about the importance of outcomes for Wamberal Beach, a majority agreed that it is important for the preferred design to visually blend into the surrounding environment (4.5), followed by protection of buildings and public lands from coastal hazards (3.52). There was less support for the statement that maintaining levels of sand on the beach as part of the long term solution was *not* important (1.46).

Table 4: Importance of outcomes

Outcome	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean score
The design (look) of the preferred seawall is not important	76.40%	8.80%	6.40%	3.60%	4.80%	1.52
It is important for the preferred design to visually blend into the surrounding environment	4.40%	0.00%	7.20%	18.40%	70.00%	4.5
Maintaining levels of sand on the beach as part of the long term solution is not important	80.40%	8.80%	2.40%	0.80%	7.60%	1.46
A seawall designed to allow for recreation activities is important (ie. running, walking)	47.79%	4.42%	12.05%	9.64%	26.10%	2.62
Protecting buildings and public lands from coastal hazards is most important in selecting the preferred option	25.90%	7.17%	7.57%	7.57%	51.79%	3.52

## Visitation

Respondents were asked to indicate how often they visited Wamberal Beach, with 28 per cent suggesting they visit on a daily basis and 16 per cent visiting 4-6 times per week.

Table 5: Existing visitation

Visitation	N	%
Every day	80	28%
4-6 times per week	47	16%
1-3 times per week	41	14%



Visitation	N	%
About once a week	31	11%
A few times a month	47	16%
Once a month	19	7%
Less than once a month	17	6%
I don't visit	4	1%
Skipped	0	

Respondents were asked to indicate the main purpose for visiting Wamberal Beach with 221 saying they visited for leisure purposes, namely walking or running along the beach (77%). This was followed by 142 saying they visited the beach to swim (50%).

Table 6: Purpose of visit

Purpose	N	%
Leisure – walking or running along the beach	221	77%
Leisure – picnic/sitting with family/friends	102	36%
Board riding/surfing	94	33%
Swimming	142	50%
Other (responses shown below)	51	18%
Skipped	0	

NOTE: Respondents able to provide more than one answer

Table 6a: Other responses

Other	N
Beachfront property/live on it/reside here	11
Dog walking	8
Holiday home/second home/visiting for house maintenance	6
Fishing	5
Photography	4
SLSC Member/work	3
Playing with grandkids	3
Work	2
Connecting with nature	2
Therapeutic exercise	1
Relaxing	1
Reading book	1
Spiritual wellbeing	1



When asked, how often would you visit Wamberal Beach if the seawall solution included a promenade, 103 respondents suggested they would not visit (40%). This was followed by 45 respondents suggesting they would visit every day (17%) or vary rarely (13%). When compared to visitation rates indicated earlier in the survey this was a vastly different response.

*Table 7: Future visitation with seawall option providing community amenity*

Visitation with promenade	N	%
Every day	45	17%
4-6 times per week	15	6%
1-3 times per week	23	9%
Once per fortnight	17	7%
Once per month	11	4%
A few times a year	9	3%
Very rarely	34	13%
I wouldn't visit	103	40%
Skipped	29	

When asked who respondents usually visit the beach with, a majority (73%) said they visited with family, followed by visiting with friends (34%). Respondents visited the beach least with organised sports (2.4%).

*Table 8: Wamberal Beach social value*

Social aspects of visitation	N	%
By myself	87	30%
With friends	96	34%
With children	57	20%
With family	208	73%
Organised sports	7	2%
Other (responses shown below)	17	7%
Skipped	0	

*Table 8a: Other responses*

Other	N
Dog	8
Partner	4
Family	2
Friend	1
Visitors	1
By myself	1



When asked what is the most important when visiting Wamberal Beach, the most frequent response (32%) was connecting with nature, followed by being able to enjoy a wide range of recreational uses (27%).

Table 9: Most important factor when visiting

Factor	N	%
Easy access	46	16%
Ability to sit and relax on the beach	72	25%
Connecting with nature	91	32%
Being able to enjoy a wide range of recreational uses	77	27%
Skipped	0	

## Solution framing

When asked how much respondents agree or disagree with statements about **outcomes for Wamberal Beach**, it was agreed that a solution that has a low environmental impact and no beach encroachment is most important (3.85), followed by a preferred seawall design that has the least possible encroachment on the existing beach (3.69). However, there was general agreement across all statements provided as shown in the table below.

Table 10: Solution frame

Frame	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean score
Easy access to the beach is the most important feature of the seawall design	11.6%	5.20%	37.20%	22.40%	23.60%	3.41
The preferred seawall design with the least possible encroachment on the existing beach is important	6.8%	6.43%	32.93%	18.07%	35.74%	3.69
It doesn't matter if the preferred seawall design encroaches a little on the existing beach as long as adjoining properties are protected from future beach erosion	33.7%	6.02%	5.22%	12.45%	42.57%	3.24
The privacy of beachside property owners should be considered when choosing a preferred seawall design for Wamberal Beach	36.0%	4.80%	3.60%	10.00%	45.60%	3.24
A solution that has a low environmental impact and	4.8%	6.77%	31.08%	13.55%	43.82%	3.85



Frame	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean score
no beach encroachment is most important						

Respondents were asked to rank considerations when thinking about a **potential solution for Wamberal Beach**. The highest consideration when thinking of a solution was given to 'lowest environmental impact' (7.24), 'minimal visual impact' (6.53) and 'least beach footprint' (6.23) with less consideration given to 'cost to build' (5.13) and 'cost to maintain' (4.88).

Table 11: Ranking considerations to assist in finding a solution

Consideration	Rank	Score
Lowest environmental impact	1	7.24
Minimal visual impact	2	6.53
Least beach footprint	3	6.23
Highest protection for adjoining properties	4	6.19
Most durable	5	5.79
Lowest impact on beach users	6	5.39
Lowest cost to build	7	5.13
Lowest cost to maintain	8	4.88
Highest social value to the community	9	4.63
Wholly situated on private land where possible	10	3.51

When asked about the **importance of sand nourishment**, respondents ranked regular nourishment campaigns to maintain beach amenity as No.1 (2.96). The least supported statement ranked No.4 overall, was the importance of a secured ongoing source of sand for Wamberal Beach.

Table 12: Ranking the importance of sand nourishment

Consideration	Rank	Score
Regular nourishment campaigns to maintain beach amenity	1	2.96
Reduced environmental impacts during sand nourishment operations	2	2.76
Visual amenity; the sand should blend into the existing environment	3	2.20
A secured ongoing source of sand available	4	2.14

When asked about **cost and durability of a seawall**, respondents gave high priority to long term seawall durability (2.7) and low priority to building a cheaper seawall requiring high ongoing maintenance costs (1.56).

Table 13: Ranking cost and durability considerations

Consideration	Rank	Score
Long-term seawall durability is most important in selecting the	1	2.7

Consideration	Rank	Score
preferred seawall design		
Minimising the cost to construct the preferred seawall design is more important than the look of the seawall	2	1.78
A higher maintenance cost is okay if it reduces the capital cost to construct the preferred seawall (such as a rock revetment with more ongoing sand nourishment costs)	3	1.56

When asked if respondents considered **sand nourishment important** as an ongoing maintenance and management strategy when selecting a preferred seawall design, a majority (51%) agreed that yes, sand nourishment will be important for ongoing seawall management and 31% saying they did not think this was important. A total of 18% of respondents were unsure.

Table 14: Sand nourishment and seawall design

Sand nourishment	N	%
Yes, I think sand nourishment will be important for ongoing seawall management	127	51%
No, I don't think sand nourishment will be important for ongoing seawall management	79	31%
I am not sure	44	18%
Skipped	36	

When asked if respondents agreed or disagreed that a **funding agreement** should be secured to ensure ongoing maintenance costs if a seawall is to proceed, a majority (46%) supported this idea.

Table 15: Funding agreement

Sand nourishment	N	%
Yes	116	46%
No	44	18%
Not sure	90	36%
Skipped	36	

## Responsibility

When asked who was responsible for the **construction of a seawall** at Wamberal Beach to provide protection from coastal hazard threats, a majority of respondents agreed it should be State Government (3.39) followed by a collaborative effort between directly affected property owners and all levels of government (3.34). The least supported statement was that responsibility for construction lies with directly affected property owners and Central Coast Council (2.67).

Table 16: Responsibility – seawall construction

Outcome	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean score
Directly affected property owners	46.09%	5.76%	6.58%	8.23%	33.33%	2.77
Central Coast Council	22.73%	7.02%	28.93%	16.53%	24.79%	3.14
State Government	17.08%	6.67%	28.33%	16.25%	31.67%	3.39
Federal Government	20.09%	8.12%	36.32%	12.82%	22.65%	3.1
A collaborative effort between directly affected property owners and Central Coast Council	30.99%	10.33%	30.99%	16.12%	11.57%	2.67
A collaborative effort between directly affected property owners and all levels of government	26.86%	8.26%	8.68%	16.12%	40.08%	3.34
A collaborative effort between all levels of government	21.49%	7.02%	25.62%	13.22%	32.64%	3.29

When asked who respondents thought should be responsible for **seawall maintenance**, respondents agreed that it should be a collaborative effort between all levels of government (3.64), followed by State Government (3.33). The least supported statement was that maintenance was the responsibility of directly affected property owners (2.65).

Table 17: Responsibility – seawall maintenance

Outcome	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean score
Directly affected property owners	48.33%	6.25%	6.67%	10.00%	28.75%	2.65
Central Coast Council	21.94%	2.95%	31.22%	16.46%	27.43%	3.24
State Government	17.30%	3.80%	34.60%	16.88%	27.43%	3.33
Federal Government	19.83%	6.90%	41.81%	11.64%	19.83%	3.05
A collaborative effort between directly affected property owners and Central Coast Council	28.99%	11.34%	34.03%	15.55%	10.08%	2.66
A collaborative effort between directly affected property owners and all levels of government	28.15%	7.56%	36.55%	13.87%	13.87%	2.78



Outcome	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean score
A collaborative effort between all levels of government	21.34%	7.11%	7.95%	13.39%	50.21%	3.64

When asked who respondents thought should be responsible for the **cost of sand nourishment**, respondents agreed that it should be a collaborative effort between all levels of government (3.82), followed by State Government (3.48). The least supported statement was for directly affected property owners to be responsible for the cost of sand nourishment (2.38).

Table 18: Responsibility – sand nourishment

Outcome	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean score
Directly affected property owners	54.43%	5.91%	8.86%	8.44%	22.36%	2.38
Central Coast Council	15.90%	2.09%	32.64%	19.67%	29.71%	3.45
State Government	15.35%	1.24%	33.61%	19.92%	29.88%	3.48
Federal Government	18.22%	4.66%	41.10%	16.95%	19.07%	3.14
A collaborative effort between directly affected property owners and Central Coast Council	31.93%	11.34%	35.71%	14.29%	6.72%	2.53
A collaborative effort between directly affected property owners and all levels of government	28.99%	8.82%	36.97%	12.18%	13.03%	2.71
A collaborative effort between all levels of government	18.91%	3.36%	8.82%	14.71%	54.20%	3.82

## Information and Knowledge

Respondents were asked where they go to **access information** about the current state of Wamberal Beach (ie. to understand coastal hazard threats and the ongoing management of Wamberal Beach) with 46 per cent indicating they always source information from Central Coast Council (3.89), 44 per cent saying they always source their information from expert coastal engineers and university research groups (3.72) and 36 per cent suggesting they always source their information from State and Federal Government organisations (3.58). Respondents least sourced their information from social media (2.34).

Table 19: Information sources



Sources	Never	Rarely	Occasionally	Sometimes	Always	Mean score
State and Federal Government organisations and publications	11.86%	12.29%	18.64%	20.76%	36.44%	3.58
Central Coast Council	6.72%	8.40%	19.33%	19.75%	45.80%	3.89
Expert coastal engineers and university research groups	10.50%	11.34%	17.65%	16.39%	44.12%	3.72
News media	33.76%	13.08%	27.43%	18.14%	7.59%	2.53
Social media	42.31%	14.53%	17.09%	19.23%	6.84%	2.34
Special interest groups	35.04%	11.97%	19.23%	22.22%	11.54%	2.63
Neighbours, friends, family	30.30%	12.12%	20.35%	24.24%	12.99%	2.77

Table 19a: Other responses

Other	N
Observation/do my own research/base my predictions on past experience	5
Real estate agent	1
Peer reviewed journal	1
I am a university trained expert	1
Wamberal Beach Protection Association	1
Seawall Action Group	1
Wamberal Beach SOS Group	1

When respondents were asked to indicate if they would **like to know about any of the topics** shown in the table below, 27 per cent said they would like to know more about the actions they can take to reduce their own risk from coastal hazards (66), followed by 21 per cent wanting to know more about who the key players were in coastal management (ie. who is responsible). The equal top response was that respondents (27%) did not feel they needed any more information about anything in relation to coastal hazards and coastal management (65). However, responses provided in the additional comments and questions section of the survey (see below) suggest that stakeholders require further clarification on elements of the proposal.

Table 20: Coastal hazards – community understanding

What would you like to know more about?	N	%
None of the below	65	27%
Actions I can take to reduce my own risk in regards to coastal hazards	66	27%
How I can help, look after my local beach	21	9%



What would you like to know more about?	N	%
How to sustainably manage coastal hazard threats in the long term	29	12%
The key players in coastal management (who is responsible)	52	21%
Other (see responses below)	9	4%
Skipped	44	

Table 20a: Other responses

Other	N
Why is a wall the only option being considered?	3
Why is a planned retreat not an option?	2
A seawall is unsuitable at this location	2
Dune regeneration	1
All of the above information (in main question)	1

## Additional comments or questions

When asked to share any further comments or questions in relation to Wamberal Beach, respondents commented and asked the following questions. As there were more than 20 comments and questions from respondents, these responses have been coded into like themes for ease of interpretation. A full verbatim account of all responses is provided in **Appendix A – Verbatim responses to open ended questions**.

Table 21: Additional comments

Comment	N
Answered	162
Skipped	124
Supportive comments	68
Unsupportive comments	145
<b>Supportive</b>	
Seawall support (in general)	29
Concept designs do not show how outcomes would look in reality/sand would cover structures most of the time (all except promenade)	10
A seawall is to protect the beach for all of the community, not just beachfront property owners (also to protect Council assets)	12
Support for Options 1 or 2 (rock buffer)	8
Support for Option 5 (promenade)	6
Seawalls causing loss of sand from the beach is incorrect	2
Current beach hazard and materials need to be removed	1
<b>Unsupportive</b>	
No/do not build a seawall	33



Comment	N
Buy back properties/planned retreat/retreat	25
Please explore other options/no other options but seawall provided/more negotiation and consultation required	16
Leave as is/protect dune system/leave natural, sand will return	15
Homeowners must accept risk/their responsibility	12
Seawalls strip sand from the beach/none of the options effective/sighting Australian and International examples of seawalls	10
Need to work out a funding model/people need to see this to assist decision making	6
All seawall options are too expensive	5
Seawall options need to be considered alongside sand nourishment/CBA	4
Environmental studies required before decision is made/questions around seawalls, flooding and lagoon erosion	4
Limitations on access for beachfront property owners will not be supported/beach access from private property to the beach needs to be maintained	4
All seawall options ugly/unsightly/unattractive	3
Hybrid solution required – different solutions for different parts of the beach	2
Council is responsible/approved DA's	2
Definitely no promenade	1
Beachfront property owners should not have to pay construction costs	1
Build an artificial reef	1
Inform real estate agents of coastal risks	1

## Demographics

Key demographic information was sought and is provided in the following tables. The results indicate that:

- Participants came from a diversity of suburbs of the Central Coast, Hunter and Sydney districts, with the highest proportion from Wamberal followed by Terrigal
- More men completed the survey than women (129 vs 93)
- A total of 9 respondents were First Nations people
- The highest proportion of participants were aged between 55 and 70 years.

Table 22: Suburb of residence

Suburb	N	Suburb	N
Wamberal	114	Koolewong	1
Terrigal	24	Mardi	1
Matcham	8	Mulgoa	1
Avoca	6	Niagara Park	1
Erina	6	Pearl Beach	1



Suburb	N	Suburb	N
Gosford	5	Shelly Beach	1
Saratoga	3	Somersby	1
Point Frederick	4	The Entrance	1
Sydney (Sydney)	3	Tumbi Umbi	1
Ryde (Sydney)	3	Woy Woy	1
Bateau Bay	2	Artarmon (Sydney)	1
Copacabana	2	Asquith (Sydney)	1
Hunters Hill (Sydney)	2	Bondi (Sydney)	1
Kincumber	2	Chatswood (Sydney)	1
Long Jetty	2	Chiswick (Sydney)	1
Mosman (Sydney)	2	Epping (Sydney)	1
Point Clare	2	Five Dock (Sydney)	1
Adamstown	1	Northmead (Sydney)	1
Denman	1	North Willoughby (Sydney)	1
Ettalong	1	Pymble (Sydney)	1
Forresters Beach	1	Roseville Chase (Sydney)	1
Glennings Valley	1	St Ives (Sydney)	1
Holgate	1	St Johns Park (Sydney)	1
Skipped	<b>57</b>	Total	<b>219</b>

NOTE: Some respondents provided two answers to this question as they live on the Central Coast part of the year.

Table 23: Gender

Gender	N	%
Female	93	42%
Male	129	58%
Non-binary	1	0.4%
Do not wish to disclose	1	0.4%
Skipped	64	

Table 24: Age

Age	N	%
Under 18	1	0.4%
18-24	14	6%
25-34	17	7%



Age	N	%
35-44	52	22%
45-54	53	23%
55-70	67	29%
Above 70	29	12%
Skipped	53	

Table 25: Aboriginal and/or Torres Strait Islander origin

First Nations people	N	%
Yes, Aboriginal	7	3%
Yes, Torres Strait Islander	2	1%
No	206	96%
Skipped	71	

The majority of respondents indicated that their **interest in Wamberal Beach** was because they were a resident of the area (58%) followed by residents that were impacted by coastal erosion (29%). Few respondents indicated that they were a commercial property owner or a representative of an interest group (both 1%). Other responses included those who own beach front property, holiday home owners and rate payers (14).

Table 26: Reason for interest in the survey

Interest	N	%
I am a resident of the area	129	58%
I am a resident impacted by coastal erosion	65	29%
I work in the area	23	10%
I am a visitor to the area	42	19%
I am an owner/operator of a business in the area	12	5%
I am a commercial property owner in the area	2	1%
I represent an advocacy group	2	1%
Other (see responses below)	25	11.31%
Skipped	65	

Table 26a: Other responses

Other	N
Impacted/beachfront property owner	8
Rate payer	3
Holiday home owner	3
Work in the area	3
Grew up in the area	3



Other	N
SLSC Member	3
Beach user	2
School that owns 59-61 OVD	1
Don't want a seawall built	1

The most popular response provided by respondents was that they lived adjacent to Wamberal Beach (24%), less than 1km from it (21%) or lived in an adjoining suburb (17%). Few respondents lived outside the Central Coast LGA (9%).

Table 27: Respondents residential distance from Wamberal Beach

Distance from beach	N	%
Adjacent to it	59	24%
Less than 1km	50	21%
Wamberal suburb resident	23	10%
Adjoining suburb resident	41	17%
Central Coast resident	37	15%
Live outside the Central Coast Local Government area (LGA)	22	9%
I am not sure	2	1%
Other (see responses below)	7	3%
Skipped	45	

Table 27a: Other responses

Other	N
Live between 5-10km's from Wamberal Beach	4
Resident part of the year	2
I live in Artarmon	1

The most frequently occurring response when asked how respondents **heard about the survey** was on social media (31%) followed by the Central Coast Council website (30%). Few respondents found out about the survey from news media (7%), information sourced from local advocacy groups (3%) or flyer in letterbox (0.4%).

Table 28: Where respondents heard about the survey

Where did you hear about this survey?	N	%
Social media	73	31%
Word of mouth	63	27%
Central Coast website	70	30%
Your Voice Our Coast page	28	12%
Local newspaper or radio	17	7%



Where did you hear about this survey?	N	%
Flyer in letterbox	1	0.4%
Direct email	51	22%
Poster near the facility	0	0%
Other	12	5%
Skipped	53	

Table 28a: Other responses







Other	N
Wamberal Beach Protection Association	4
Wamberal Beach SOS campaign	4
News/Newspaper	2
Forwarded emails	1
Field left blank	1

## Social Pinpoint

Open ended responses provided on Social PinPoint for each of the five seawall design concepts for Wamberal Beach have been listed as top responses for supportive (Something I like), unsupportive (Something I don't like) and general comments (Make a comment) ranked according to the amount of reactions each comment in each category received. Individual comments were either given a thumbs up or a thumbs down reaction from other community members indicating agreement or disagreement with each statement. Verbatim comments can be found in **Appendix A – Verbatim responses to open ended questions**. A full unedited list of responses can be found here.

### Wamberal Beach existing environment

Table 29: Supportive and unsupportive comments for the existing environment at Wamberal Beach





Wamberal Beach - existing environment	N	
Something I like	33	
Something I don't like	3	
Make a comment	34	
<b>Top 3 responses – Something I like</b>		
It is a well established pattern that when a sea wall is created it leads to further erosion of the sand located in front of it. Why let the interests of these 60 or so properties outweigh the interests of almost 20,000 people living in Terrigal and Wamberal.	17	1
Keeping the natural gentle slope of the beach and dune is the only way to maintain that critical piece of beachfront as it has been for thousands of years. This is the only solution that will guarantee the thousands of visitors and local members of the community continued access to this section of the beach. Any other solution will eventually erode the sand completely devastating the environment and community alike.	15	1
Should be left as is and houses removed. They should not of been built in the first place. With the houses gone the dunes will look after the beach and other properties.	11	1
<b>Top response – Something I don't like</b>		
Status quo is a dump ... damaged foreshore, unsafe areas and property in disrepair.	4	0
<b>Top 4 responses – Make a comment</b>		
The top left looks best!!! [existing beach] The Wamberal Community do not want a seawall!!! Please listen. I would prefer our beach not look like the attached photo!! It's disgusting.	13	1





Wamberal Beach - existing environment	N	
Each of the five options talk about the ability to reflect wave energy when they should be looking to disperse wave energy as the sand does naturally already except for where private land owners have built too close to the wave zone creating 'cliffs' that cause waves to reflect and drag sand away.	12	0
Make sure we don't enter into a contract to pay for sand from Westconnex. It is not compatible sand with Wamberal. We would end up paying to take their waste when they should be paying us to take their waste. Tipping fees would be \$200 a tonne for Westconnex. Instead our Administrator can enter into a contract to pay for their waste and the residents get no say on the contract.	9	0
There is plenty of sand in the sea, it will restore naturally. Property Owners should be given the option to protect their property at their cost. Most of the restoration work is not on Council owned land. The legalities of the Council doing work on private land is an issue with any Council intervention. The best engineering solution is buried sand bags, stabilised with concrete and allowing the sand to naturally restore.	9	4

## Option 1: Rock Buffer with basalt





Table 30: Supportive and unsupportive comments for Option 1



Option 1: Rock Buffer with basalt	N	
Something I like	3	
Something I don't like	24	
Make a comment	15	
<b>Top response – Something I like</b>		
NIL responses	0	0
<b>Top 4 responses – Something I don't like</b>		
The impact to the beach will be that of a breakwall with the waves reflecting off the large stones. This process erodes the sand which will eventually result in the loss of the beach completely. If this was to occur it would devastate the local community and visitors alike. Adding to this is the inherent danger a rockwall will pose to both surfers and swimmers if they are swept onto the rocks. Wamberal Surf Club will also lose access to this section of the beach placing lives in danger.	12	2
All photos are misrepresented of the current conditions. Look at what the wall and rock remediation has done to both Terrigal Beach and parts of Wamberal beach atm. These are not the only options and want to see the raw data from the initial community consultation. Walls ruin beaches and removes the sand. The only community members that want this is the 60 odd residents that have houses along the beach. On many cases those residents fought against Council to have their houses constructed closer.	10	2

Option 1: Rock Buffer with basalt	N	
By far the worst option. Ruins aesthetic of the beach and it's appeal.	7	0
This option and the two tiered walls are by far the ugliest and ruin the aesthetic of the beach.	7	0
<b>Top 3 responses – Make a comment</b>		
The only worthy option is not listed, so this CCC process is flawed. The only acceptable option is the protection of the beach through the restoration of natural incipient and primary dunes/processes which are undermined by about 12 large homes that are unviable, perched too close to the beach, undermining the capacity of the beach to maintain a healthy sand budget. Where is the dune rehab plan? Negotiate and selectively relocate unviable homes. Don't push private externalities onto the public.	19	2
All these options show a seawall with a beach. This is very misleading and biases the survey. The only realistic pictures would show a wall with no sand.	5	0
This illustration does not represent the real world height difference between the beach and the residence backyards. the current drop is 5-10 in parts. This looks like 2m at most. Is sand being imported to build up the height of the beach?	5	0

## Option 2: Rock Buffer with sandstone







Table 31: Supportive and unsupportive comments for Option 2

Option 2: Rock Buffer with sandstone	N	
Something I like	9	
Something I don't like	16	
Make a comment	8	
<b>Top response – Something I like</b>		
The 2 rock-wall solutions look the best. The wall will be buried by sand and they will provide stability to the dune which will protect the beach for everyone.	2	1
<b>Top 3 responses – Something I don't like</b>		
The impact to the beach will be that of a breakwall with the waves reflecting off the large stones. This process erodes the sand which will eventually result in the loss of the beach completely. If this was to occur it would devastate the local community and visitors alike. Adding to this is the inherent danger a rockwall will pose to both surfers and swimmers if they are swept onto the rocks. Wamberal Surf Club will also lose access to this section of the beach placing lives in danger.	8	1
This is a farce. The pictures convey the idea that these revetments will maintain the beach berm and cusps, whereas it is highly likely the beach will shrink within a few years, eventually disappearing. Also, none of the revetment options call out the fact that a revetment in one section of beach will transfer wave energy to adjacent	6	0

Option 2: Rock Buffer with sandstone	N	
beach areas, spreading the problem. Council is bankrupt. I request an interview with the relevant CCC decision-makers. This process is run by engineers.		
How will the natural fore dune be able to rebuild with this option. This also creates a hard barrier that will most likely erode the beach to a very narrow and unusable strip of sand as has happened at Terrigal.	5	0
<b>Top response – Make a comment</b>		
All photos are misrepresented of the current conditions. Look at what the wall and rock remediation has done to both Terrigal Beach and parts of Wamberal Beach atm. These are not the only options and want to see the raw data from the initial community consultation. Walls ruin beaches and removes the sand. The only community members that want this is the 60 odd residents that have houses along the beach. On many cases those residents fought against Council to have their houses constructed closer.	6	0







### Option 3: Vertical Wall with rock toe

Table 32: Supportive and unsupportive comments for Option 3

Option 3: Vertical Wall with rock toe	N	
Something I like	0	
Something I don't like	17	
Make a comment	6	
<b>Top response – Something I like</b>		
NIL responses	0	0
<b>Top 4 responses – Something I don't like</b>		
The reflection of waves from the wall will result in the loss of the beach completely. Benefitting only a small few the impacts would devastate the many thousands of locals and visitors alike who use this beach. Adding to this is the inherent danger a wall will pose to both surfers and swimmers if they are swept into it. Wamberal Surf Club will also lose access to this section of the beach placing lives in danger as only limited equipment can be quickly brought to the scene of any rescue.	18	0
Ugly, waste of money.	12	0
Destroys the beach and the animal/marine life habitats.	11	0
This is looks very, very ugly, how long until it is covered in graffiti. If you like the sensation of walking alongside a prison wall then this might work. Apart from that the sand will most likely be washed away as has happened at Terrigal. Removing the foredune to build a wall seems very environmentally destructive.	10	0
<b>Top response – Make a comment</b>		
Definitely not, our sand will be lost	2	1





## Option 4: Vertical Wall without rock toe

Table 33: Supportive and unsupportive comments for Option 4



Option 4: Vertical Wall without rock toe	N	
Something I like	0	
Something I don't like	22	
Make a comment	2	
<b>Top response – Something I like</b>		
NIL responses	0	0
<b>Top 3 responses – Something I don't like</b>		
This option would most likely result in the eventual total loss of sand on the beach. It has no regard whatsoever for trying to maintain natural beauty or ecosystems at all. It looks like a prison yard wall.	13	2
Seawalls don't absorb the waves energy, they just deflect it. In an event of an ECL where all of the sand is removed from in front of the seawall, much of the force of the waves energy is moved to the ends of the seawall. In this case Terrigal and Wamberal Lagoons. Wamberal Nature Reserve, (National Park), on one end... hundreds of homes surrounding Terrigal Lagoon on the other. Pure madness.	12	0
The reflection of waves from the wall will result in the loss of the beach completely. Benefitting only a small few the impacts would devastate the many thousands of locals and visitors alike who use this beach. Adding to this is the inherent danger a wall will pose to both surfers and swimmers if they are swept into it. Wamberal Surf Club will also lose access to this section of the beach placing lives in danger as only limited equipment can be quickly brought to the scene of any rescue.	9	0
<b>Top response – Make a comment</b>		
All the vertical seawall options I do not agree with. The sand will be lost and the beach ruined to protect a dozen houses.	7	0

## Option 5: Tiered Wall with promenade

Table 34: Supportive and unsupportive comments for Option 5

Option 5: Tiered Wall with promenade	N	
Something I like	15	
Something I don't like	29	
Make a comment	16	
<b>Top 4 response – Something I like</b>		
I think option 5 adds to the environment in addition to the value of a seawall. It would improve access to the beach for people of all ages and mobility. It would be a tourist attraction for the area.	8	9
Great idea! Myself and many members of the community have always discussed how a promenade was needed. Seen effective on the Gold Coast. Makes sense to build something that'll last!	6	13
Best of the 5 options by far. Either this, or no sea wall the preferred options. The rest are neither here nor there.	6	6
Great for running and walking without worrying about cars and roads! The public should get something out of this!	6	4
<b>Top 5 responses – Something I don't like</b>		
Private access to the beach should be removed entirely. Equitable, public access should be provided at existing public access routes.	10	1
The reflection of waves from the wall will result in the loss of the beach completely. Benefitting only a small few the impacts would devastate the many thousands of locals and visitors alike who use this beach. Adding to this is the inherent danger a wall will pose to both surfers and swimmers if they are swept into it. Wamberal Surf Club will also lose access to this section of the beach placing lives in danger as only limited equipment can be quickly brought to the scene of any rescue.	9	0
After a few years of storm surges, it will be goodbye beach. This photo presents the lie that the beach berm and incipient dunes will not be undermined by the wall. They will. Many other homes on the right side of the photo are not at risk. Start again. Hands off our beach.	8	2
The CBA must consider the loss of value to our (Central Coast ratepayers) homes and loss of revenue to our businesses caused by the wilful destruction of this major piece of recreational and tourism infrastructure. The overall effect on the Central Coast economy will be significant and unjustifiable to save 60 houses on clearly unsuitable land. Not to mention the major social, environmental and economic benefit of returning land back to the public use.	8	2
Where is the natural environment, it looks like a skate park.	8	1



Option 5: Tiered Wall with promenade	N	
Top 3 responses – Make a comment		
I like the idea of Option 5 as it is the only one that has a promenade. The cost would be worth it, so the beach would have easy access from Terrigal to Wamberal for all ages and disabilities to enjoy and use, like they do now with the new Terrigal boardwalk. This could be like a continuation of this would benefit both businesses and tourists, as well as achieving better accessibility for residents. It would open up the whole of our area, whilst also protecting beach front homes.	7	6
I like this option as it provides public benefit particularly for families with young children, the elderly and disabled who would be able to enjoy a walk along a beachside promenade other than Terrigal.	5	8
A terrible option. Just as Terrigal Beach has disappeared with their wall that is what will happen here. Leave Wamberal as a natural beach. We don't need it to be an extension of Terrigal, nor do we need the disastrous impacts of a sea wall.	3	1



## Appendix A – Verbatim responses to open ended questions

The tables below provide a complete verbatim account of the responses to Question 19 in the survey and comments left on each of the design concept renders on Social PinPoint.

### List of acronyms:

- CCC – Central Coast Council
- CMP – Coastal Management Plan (in development)
- CZMP – Coastal Zone Management Plan (existing)
- DA – Development Application (lodged with Council)
- MHL – Manly Hydraulics Laboratory
- OVD – Ocean View Drive, Wamberal
- SLSC – Surf Life Saving Club

### Survey (Q19) responses

Table 35: Further comments or questions in relation to Wamberal Beach. Unedited list.

Verbatim response – SURVEY feedback
Seawall concept design options look very strange and do not properly depict the reality of how the options would look. I don't understand how the design options could have significant footprint on private land and should be placed on public land but buried in the sand to ensure the amenity of the beach.
The seawall options and their render designs are very poor and do not give a true indication of what some of the options would look like, particularly when covered with sand. A protective seawall would benefit all Wamberal property owners - those on the beach as well as the low-lying blocks between the beach and the lagoon. An understanding of what equitable funding model will be used with all levels of government contributing is essential to choosing which seawall solution to go with.
None of the options are particularly attractive. Any option should be only visible during/after a storm. No solution using rock bags or baskets is included which has already been proven to protect the beach and properties. Finally, there's no need for sand replenishment if rock bags are used as the beach will self replenish after a storm event. I definitely don't want a promenade. Ugly and useless.
Reports in the public are lacking key points of information
The 5 'seawall' concept design options offered in the MHLL Report are poorly portrayed and ill-considered. The beach topography requires a hybrid solution with differing structures required along different sections of the beach.
My view is that a seawall is not the best option for the larger community, if proper community consultation was taken this wall wouldn't be an option. It isn't hard to see the results of creating a reflective structure on the beach sand ie: Stockton, southern Terrigal, Byron Bay Noosa. The list is endless. All I am seeing is the community being whitewashed because a politician has promised some wealthy land owners that they will protect their homes/ Interests.
I believe the beach should remain as close to nature as it is now. I support the protection of properties there as a precedent has been set to allow residents to the right to live there as it was acquired.



Verbatim response – SURVEY feedback
Everyone benefits from preventing sand dune erosion including properties behind the direct property owners and visitors to the beach. Maintaining access to the beach from beachfront properties is important.
Access from beachfront properties most important. Sea wall benefits all properties associated with Wamberal Beach.
Stair access to beach and seawall benefits the community and not just beachfront properties. This is likely to be impost on beachfront properties and vertical wall designs don't appear to allow access.
Protect the beach and the dune for locals and visitors.
There are better options than a seawall.
I'd like to see a design for a restored dune with green space behind it. A walking path, perhaps BBQs, some extra parking and perhaps room for exercise equipment and swings... a shower, a regular beach market with stalls along ocean View Drive. Or even a new development of narrow/low rise apartments built behind a really secure dune. There is a hazard line, these properties were put there before we knew about climate change. But them back. Demolish them. Rethink the area. It could be a standard for other areas in the same situation.
<p>The 5 options presented are unsatisfactory. They ALL detract visually from a natural area and design can be far better than that presented by Council. As a beachfront landowner there has been NO CONSULTATION about the siting of the wall wholly on private land. This needs far greater negotiation. We will not support limitations on access. We have maintained our own beach access stairs for 40 years and will not entertain that usage being removed as part of this process.</p> <p>The survey itself is flawed with 'leading questions'. This is designed to pit landholders against beach users - a 'them and us' scenario. This is designed to split the community so government is the end does nothing. I remind the Council of the Millions and millions spent defending the homes of many against bushfires that will increasingly ravage our east coast with climate change - but we are treated like 'affluent snobs' who don't deserve a cent nor any support. please explain now this is any different to the hundreds of millions of dollars spent on fire protection by the RFS - yet coastal damage from climate change is ignored.</p>
<p>I do not support any suggested wall options due to the greater environmental impacts from the construction and sand renourishment. Also, the problem with grey infrastructure like revetment walls is that they may protect what is behind them. Although, Walls do not stop erosion; they modify coastal processes by deflecting wave energy, reducing sediment supply, and thus amplifying the erosion of the sand from the beaches that require continuous re-nourishment due to changes in coastal processes.</p> <p>The vertical wall and wall with promenade would be the worst for this.</p> <p>The research literature clearly shows that revetment walls create erosion and reduce the beach width and amenity, thus reducing resilience. Reduced beach width significantly diminishes coastal resilience to climate change and storm events.</p> <p>International experience shows the era of routine armour emplacement is coming to an end in California and the United Kingdom. So why are the State Government and Council looking to build Revetment walls like the one proposed at Wamberal? Adaptation measures are moving from the 20th century model of building coastal defence structures towards reducing the vulnerability of populations to the impacts of climate risk.</p>





Verbatim response – SURVEY feedback
<p>With the cost to build the wall, the environmental impacts, and the ongoing maintenance cost, along with the sand renourishment. I look forward to the environmental studies that should have been included in this round of public consultation.</p>
<p>Home owners must accept risk to their property.</p>
<p>I would support Council/state and Federal Governments buying the land (at land value) back from property owners at tax payer expense and restoring the dunes. If this does not occur all the build and ongoing costs and the physical impact of any solution should rest solely the property owners. The issue has been known for over 50 years and still property owners insist on building in that location.</p>
<p>I have lived on the beach at Wamberal for over 13 years and have experienced both the 2016 and 2020 storm impacts on our property, I am very conversant with nature and its effect on our beach. I am incredibly disappointed as to the deliberate miss communication and representation of the 5 proposed sea wall structures, MHLL and CCC have deliberately guided the community to choose option 5, by adding a beautiful promenade, greenery, exercise areas, art walls and NO mention of these on the most sensible option 1 and 2?? Why is this so?? I spoke to a CCC representative regarding why are the renders of option 1 and 2 showing rocks, and no greenery etc her response absolutely floored me she indicated considering 48 week of the year the rocks will be exposed, we need to show the rocks exposed. I couldn't believe what I was hearing, it is completely and utterly incorrect MHLL report actually indicates the rocks will be exposed only 4 weeks of the year, not 48 weeks of the year. How can we as residents take this feedback seriously when CCC have deliberately misguided the public ,the community will obviously choose option 5 as it appeals to them, greenery, walking the dog on a pathway, art works exercise areas, they wouldn't choose some ugly rocks, be fairdinkcom.</p> <p>I would strongly suggest to publicly acknowledge the errors and make good, my opinion is to build option 1 or 2, it is the least aggressive, most cost effective, and is astatically pleasing. W. Hughes 0414XXXXXX (X Pacific St, Wamberal).</p>
<p>The most important reason for a sea wall is to preserve the beach from erosion. There is no need to provide easier access to the beach or to provide a space where people can walk, run or sit and enjoy the view. There is no problem enjoying all those activities as the beach currently exists as evidenced by the number of people using Wamberal Beach on a daily basis.</p> <p>The purpose of a sea wall is not to attract people to the beach but to keep the beach in its current condition so that people, whether local residents or visitors, can continue to use it for years to come. A promenade style seawall would detract from the natural beauty of the beach coastline.</p> <p>It's disappointing to see that all of the design options have a significant footprint on private property, yet there was no conversation with the affected property owners beforehand. Beachfront property owners should not have to bear any of the construction costs. It's not a private beach. It's probably used more extensively by local residents and visitors than the actual property owners.</p> <p>The beach is a recreational space Central Coast Council provides for all of its residents. The beachfront property owners pay rates like all the other residents which go towards the upkeep of these recreational</p>



Verbatim response – SURVEY feedback
spaces. Expecting these property owners to contribute more to the construction costs of a sea wall is like double dipping. Council needs to look at a more simplistic and cheaper design that has less impact on the natural environment and seek other funding avenues if needed.
Wamberal dunes provide protection for both beachfront properties and the properties behind the dunes so the cost to build and maintain a seawall should not be just for beachfront owners.
Why doesn't the CCC or NSW government just finish the emergency works they started last year and place more bagged rocks along the beach.
There are 500 homes west of the beach that would be directly affected if the front line was breached. The proposed design options are too expensive.
Seawall long overdue.
I am concerned that a hard seawall may adversely affect the natural environmental patterns of the beach.
I'd prefer no wall. Leave it as it is with occasional sandstone rock and sand deposits to protect properties from falling down the bank. Stop the destruction of the dune with massive excavations. Plant grasses and anything else that will help build a natural fore dune. Insist that dunes be stabilised by plants. Plant trees along the roads to protect that infrastructure.
No.
<p>This survey I found had many flaws and is misleading in it's questions. I feel that the renders in that have been put forward are terrible. I've been visiting Wamberal Beach for over 30 years and a single solution for the entire beach is not feasible given the different dune height from Terrigal to Wamberal as a start. The designs also encroach on private property? Will they have beach access, what about privacy? What about public liability? How is it all going to be funded - do you think that all the owners will be able to afford hundreds of thousands of dollars each? Some have held their property within their family for generations and are not rich developers. Have you engaged with them about what they want individually? What may suit the beach at Pacific Street, will not suit the beach near the surf club at Wamberal. Hybrid solution with consultation with each property owner should be considered.</p> <p>Finally why even suggest a promenade - it is not Bondi or Manly, how insensitive to the people of the area that this is what they would want. It is the beautiful Wamberal Beach, it needs to stay as natural possible and definitely dog friendly.</p>
The survey is ill conceived and the designs put out to the public are in complete and misleading in many aspects. The beach is a closed system the sand has always returned after a storm and all these suggestions that permanent protection will cause sand loss if very wrong.
Please everyone work together to save the beach, community and houses

**Verbatim response – SURVEY feedback**

I am concerned about the survey as it seems based on the premise that sand will be lost in some of the renders. I don't believe that any of the options will result in a loss of sand according to the scientific research. In the reports and renders there isn't enough detail for each to be considered fully. On the face of the renders, each has something to recommend it but they seem over priced not only in construction but also in the costs of maintenance.

The seawall options in the report need to be outlined in greater clarity including such areas as beach topography, the structures and the range of possible blending of these options. I am in favour of a mixture or hybrid of these solutions as the beach is different at various points. The heights vary for example and differing structures are required along different parts of the beach.

I strongly disagree with what appears to be an assumption that every one of the design options will have a significant footprint on private property. This cannot be determined without discussion and engagement with all the owners and residents of those affected properties.

In regard to the funding model, the equity of putting 80% of this cost on the owners is totally questionable. The Collaroy model puts the major cost of the project on the owners but with no leadership or management of the process by the owners. The whole funding model must be discussed and agreed transparently. This should include the ongoing maintenance costs and who will fund these.

It's time for a solution - no more talk & buck passing!

No.

Anyone that authors a paper/report that recommends building a seawall, or anyone that is part of the seawall approval process needs to have their names on a plaque at the beach so future generations know who to blame when:

- the beach is no longer usable because of the impacts of the wall on nearshore hydrodynamics and sediment transport,
- the wall fails,
- maintenance costs blow out.

The public needs to know when the current landowners purchased their properties. The beach erosion problems were well known since the 1970s, and coastal erosion impacts due to climate change were identified in the late 1980's. Anyone that purchased a property since the early 1990s deserves NO public funding of coastal protection for their own stupid mistake of buying a beachfront property on an eroding coastline.

The Phase 1 Consultation Report (March 2021) clearly indicated that when considering any long-term solutions to erosion at Wamberal Beach, the most important factors identified by the survey respondents were (page18):

- Maintaining a sandy beach (80.9% very important)
- Maintaining the functional uses of the beach such as swimming, surfing, recreation on sand (81.8% very important)
- Protecting the natural processes of the beach (79.0% very important).

All of these responses are contrary to the proposition of building a sea wall.



Verbatim response – SURVEY feedback
<p>The Phase 1 Consultation Report (March 2021) also states (page 8 of untitled table): "There are many seawalls that co-exist with healthy, high quality beaches. Manly, Bondi and Newcastle (main beach, not Stockton) are good examples of this situation." This statement contains many unfounded claims and, as any decent coastal scientist knows, the comparison of the beaches listed and the types/positions of sea walls is not valid. Whoever wrote/approved that statement needs to hand back their degree.</p>
<p>No.</p>
<p>I think action needs to be taken to save the beach and residents long termed. But the least impacting wall to maintain Wamberal's natural appeal is most important.</p>
<p>The seawall concept design options are incomplete and require more dialogue. There is need for sand renourishment is necessary in any solution and not a separate option.</p>
<p>A buried rock revetment from lagoon to lagoon is the best solution and a fraction of the cost of current design options.</p>
<p>No.</p>
<p>How about a buried rock wall because beach sand always washes in and out. It needs to be an effort by all levels of the government to save the beach and the houses.</p>
<p>Please fix for everyone. The beach should be enjoyed by all.</p>
<p>A buried rock wall is the way to go.</p>
<p>Many of the questions are misleading and therefore difficult to answer. A buried rock revetment wall along the entire beach as a continuation of the emergency works done in 2016 will best protect the beach.</p>
<p>I want the protection of Wamberal Beach to be the highest priority for the Council. We need to have an effective response.</p>
<p>Sand gets washed and comes back all the time. Fix the problem. A buried rock wall thing is what all the research says and the State Govt and CCC (if they had any money) should be protect this tourist strip. It's been going on too long.</p>
<p>The questions in the survey seem biased and directional seeking a predetermined outcome. For example, you will not get an accurate response to questions relating to which is the preferred options for Wamberal protection without also providing the cost assumptions of each of the options and importantly, who pays. Most people would naturally navigate to the most expensive solution (thumbs up for a Bentley!) if 'others' pay but may have a very different selection (happy for a Toyota) if they had to contribute to funding the solution.</p> <p>The recent published concept renders are also terribly misleading to the public which will also bias responses in the survey. Option 1&amp;2 in the renders show top to bottom fully exposed rock revetment along the beach providing a very ugly visual. Yet in the technical documents (104 pages that the public likely would not read), option 1&amp;2 are buried 95% of the time or 49 weeks of the year. Why is the render then depicting 2 weeks rather than what the location will look like for 49 weeks as a visual guide for option 1&amp;2? And it is well known that native vegetation will be grown over the top of the rock revetment giving the solution a very natural look along the beach, as is the case of the existing buried rock revetment on the northern end of Wamberal Beach just south of the Wamberal SLSC. If you currently visit this location, you will not even know a buried rock revetment exists along this stretch where it sits from the crest of the dune at about +10m to the toe. Option 5 render, on the other hand, is a more finished render giving the public</p>



**Verbatim response – SURVEY feedback**

the impression that it is the best visual of the available options?

There are assumptions that all design options will have a significant footprint on private property. How can Option 5 with a public promenade be built on private land? Surely there are legal issues regarding public amenities being built on private land. And it seems obscene that any of the options have sought public comment but without first engaging with meaningful dialogue with the affected property owners if all options will reside on their land.

The survey and recent publish documents regarding the protective structure reference directly affected property owners but should always read affected property owners. All property owners in Wamberal, including Ocean View Drive and those living west of OVD will benefit from a Terminal Protective Structure. CCC in their 2014 Terrigal Wamberal Beach coastal hazard map clearly identifies OVD and homes landward of OVD being severally impacted by the 2050 Hazard Line (zRA & zRFC). And CCC recent emergency works where Council placed about 100 buried rock bags along the beach following the storm surge, roughly 50 bags were placed in front of the Council empty blocks sitting on the foreshore. Was it coincidental that bags were placed in front of empty Council lots, was it to stop and protect further erosion to OVD, to protect homes either side of these location or both? CCC needs to be more forward that all property owners in Wamberal will benefit from a Terminal Protective structure and not just those along the foreshore.

It would seem from the technical report and beach topography that a 'one size fits all' solution for Wamberal, lagoon to lagoon is illogical and ill-considered. Even in places like Collaroy where the protective structure along the beach is smaller than Wamberal, they designed different solutions for different parts of the beach. It would seem a hybrid solution with differing structures along different sections of the beach is a better solution for a Wamberal protective structure.

No.

Erosion issues have been an issue since the 70's when my former Headmaster Mr Harry Egger lost his home. The issue has been left to boil over this time and development allowed. Since the 70's development should have been banned. However, since it has happened a Seawall should be erected to protect the dunes from eroding. Thank you.

Yes. We don't believe you are attacking the core problem, which I believe is the strong currents which rip up the beach North in winter and south in summer. A survey should be done re installing tailor made surfing reefs to make it one of Australia top surfing breaks, this is one of the few beaches with a true easterly aspect. An artificial reef would create a sand build up on the leeward side I'd the reef.

It is not the property owners that should be responsible for the cost of the sea wall as it is for the community that it be done.

We have been promised a seawall. Properties are being destroyed. Properties that were authorised to be built there on the Council's terms. This much delay is not good enough. Take action now!

Perhaps in the future Council should have buyers/developers pay for beach maintenance.

Council is solely responsible as they issued the DAs to build.

Council have allowed residents to build/live there so they are responsible.

The questions are difficult to answer without asking another question. The questions seem to be formulated to achieve a certain predetermined result.



Verbatim response – SURVEY feedback
I am completely against any type of ugly sea wall the Collaroy beach which is having a wall built at the moment looks atrocious. I am also against the home owners bearing any cost for a wall we already pay enormous rates and taxes for living there.
No
No
No
No
The survey seems to identify the beachfront owners as the only ones "directly" affected. The whole of Wamberal is threatened, not just those in the front line. There's no mention of how this is being funded and how this is fairly funded by ALL stakeholders, including all levels of government who own the road, crown land and some of the beachfront blocks and public amenities like the surf club. You have not consulted with any of the owners when designing a footprint almost entirely on private property. The 5 options are not fully resolved and no one option is workable with every property. A hybrid solution is the only solution. Additionally, the renders are poor quality and not representative of the whole beach topography. There is missing information, and the survey is illogical and misleading, feeling like one is being directed to answer in a certain way.
I read the report and I can't reconcile the summary with the bulk of the concern. The survey seems to be leading people to a walkway solution - this is likely too costly and probably unrealistic as it requires easements over private land. Sand nourishment has never been a problem a Wamberal - the sand and the beach always return. The '5 options' don't consider the impact across all homes and again looks impossible to achieve. It needs a different solution at the differing heights of the dune on the beach - north is different to south. Funding needs to be agreed which is equitable - whilst the cost should largely be borne by the affected properties the last storm came close to washing Ocean View Drive away at one particular section. Selling the state owned blocks seems so obvious as a means to fund any shortfall its surprising this has debate has gone on for so long. I would advocate selling the blocks and passing the rest of the cost onto the owners of the properties - maybe state govt should provide a small grant. Council has to do something - the emergency works were a waste of Council funds.
Protection of the beach is for the benefit of the entire community - residents, businesses and visitors. There would be many affected property owners and businesses around the lagoon and low lying areas of Wamberal if the dune is lost - not just those properties directly abutting the beach.
Build the sea wall.
NO.
Build the wall.
The questions in the survey are leading. It's impossible to answer some questions as the answer depends on many variables. Question 7 - access for who? The questions would be answered differently by most people if they understood the impact on State and Local Government assets and private property behind the front line should a terminal protection solution fail to be resolved. What about the question "Do you understand that Ocean View Drive, mains infrastructure and properties behind the beachfront will be impacted within the next 50 years?"
We have been residents since 1984. We have tried to get the Council to manage the sand erosion and build a seawall. The Council's reply was to plant sea grass. The beach is for the community, and all use the beach.



Verbatim response – SURVEY feedback
<p>So all should benefit when considering protecting the sand dunes. The cost of protection should be paid evenly by the federal/State Governments mainly. And maintenance to be spread evenly by the local community of Terrigal and Wamberal through Council rates. This is a public beach owned by all Australians.</p>
<p>It is very important that the Council finally agrees to do something serious with the sea wall at Wamberal after many, many years of false promises. They keep stalling whilst the beach and property owners are suffering, as well as the community directly behind the houses are also at a considerable threat. Too many promises - zero action so far.</p>
<p>Both the designs and the survey are very poorly presented. The designs do not give specifics regarding heights etc. at the southern end of the beach. There has been no consideration or design given of a buried rock revetment. Because Wamberal Beach is an enclosed embayment the sand returns so the buried revetment would be covered for 95% of the time therefore will keep the beach naturally nourished. I think the current designs are unnecessarily expensive, unattractive and not the answer.</p>
<p>No.</p>
<p>No.</p>
<p>It is very difficult to see how any of the design options proposed will not have a significant negative impact to the amenity of the beach. They are poorly portrayed and lack detail.</p>
<p>Funding decision should be separated from the decision to build. Wamberal competes with other NSW beaches and the look of the beach is important in bringing tourists and visitors. Better communication needs to be had with special interest groups who are spreading falsehoods.</p>
<p>Illogical questions throughout survey will only confuse participants A floored document.</p>
<p>The sand refurbishes itself with time. Any seawall with a walkway would be unsightly and horrible. No-one except vandals would use it. All we need when the present bauxite rocks become covered is another course of rocks on top of them. I have been there for 33 years and have seen the water rise and recede continuously.</p>
<p>Survey references to 'directly affected property owners' is ill-conceived, without identifying which properties are meant. There are 500 homes west of the beach that would be directly affected were the front line to be breached. The MHLL Report suggests that each of the proposed design options would be placed on private land. Has this been discussed / requested / negotiated with those land owners? The NSW Government [at Ministerial level] is pushing for a 'beneficiary pays' principle for funding this type of infrastructure. Will the Government and Council acknowledge that they are significant beneficiaries of a TPS on Wamberal Beach? A buried rock revetment is what's required. Why doesn't the CCC and/or the NSW Government just finish the emergency works they started last year and place more bagged rocks along the entire beach. These bagged rocks will then be covered up by sand 95% of the time. Due to Wamberal Beach being an enclosed embayment, sand is NEVER permanently lost, the sea taketh sand during episodic storm surges and the sea giveth sand back very quickly. This is an indisputable fact, proven time and again over the years. The proposed design options are terrible and unduly expensive.</p>
<p>There needs to be a long term solution agreed by all landowners and Council with regards to the seawall. The seawall not only protects the sand on the beach, the homes, but also all the infrastructure behind the beach and beyond the road. Council have ignored this for far too long now and a bi-lateral solution is now essential.</p>



Verbatim response – SURVEY feedback
Reports on options lack information to make fair decision. Save Wamberal - Houses, Beach and from future damage. Its everyone's problem.
It is important to seriously include other options to protect Wamberal Beach in the planning phase than only variations of a seawall. This process appears bias towards the building of a sea wall.
Action has been proposed for many years, just get on with it.
The survey is very confusing and not very well put together. a lot of questions misleading.
This process is entirely unconvincing. Respectable expert voices oppose the sea wall - because they destroy beaches -yet they aren't even acknowledged by Council. It's not lost on anyone paying attention, how old the document relied on for this "solution" is, and its shortcomings. Nor is the injustice of making the broader community pay - whether that's through Council, state or federal funding. This is wrongheaded short-sightedness and very sad. True cowardice on behalf of Council, bowing to private interests at the very significant expense of your community.
I strongly support a recreational promenade shared pathway for cyclist pedestrians and beach goers because it is a unique opportunity to enhance these activities. Walkways are the most popular recreational activities throughout the municipality providing gathering and socially strengthening the community.
LOVE the inclusiveness and access potential of the promenade, option 5! Thank you for considering excellent design options to make our community better, for all to enjoy. Once you've built the promenade, can we please turn our attention to removing the war memorial, which had no community consultation and is an eyesore with no qualified designers behind it. How fabulous it would have been to have something forward thinking and celebrating quality of life rather than something depressing and taking up 1/3 of the only grass area and cannot be touched or enjoyed by anyone. Hanging string lights that come to life or a modern, non invasive structure celebrating life... oh how wonderful it would be if all elements of Terrigal and Wamberal development was forward thinking and collaborative within the community as this promenade design. Please get your team onto resolving our awful memorial following completion of this project! It is an eyesore.
BRILLIANT WORK ON THE PROMENADE - thank you for considering and consulting all in the community, not just a small group (as happened with the war memorial.) Thank you!
We 100% believe in a walk that also protects erosion. The Central Coast is becoming the walking mecca of NSW. We believe investing into a Santa Monica style walk would change everything.
Constantly distributing any amount of information distributed to the public, residents, community etc. This will inform them of the correct information and will reduce the amount of misinformation regarding the seawall and all things associated with the seawall ie. environmental impacts, designs, costs etc. Even if there is the reports and information is not yet able to be distributed to the public at least releasing something such as a flyer, newsletter, email every 2-4 weeks letting them know that behind the scenes you or MHLL or whatever group/organisation/company is currently working on something for the seawall. This will show that it is still at the forefront of your plans and you are still working towards something rather than not announcing anything and then all of a sudden documents/reports are available. It could be as simple as a half a page update as to what options you are exploring, looking deeper into the costs involved in acquiring sand for the sand nourishment, conducting more research on the beach, collecting more opinions or information regarding the beach, conducting more consultations with the community.





Verbatim response – SURVEY feedback
<p>I also think that the concept designs unfortunately do not do justice for what the designs will actually look like. I understand that they are just concept designs and it is just to provide a way for the public to visually see what the options are but it just does not depict what it will actually look like. This has caused some anger with the community as these concept designs look worse than what they were imagining and has caused them to not like any of the designs. The detailed reports that should show a more accurate image of what they designs will look like along the beach ie. rock revetment designs being 90% buried by sand, vertical seawalls being located as landward as possible etc. Unfortunately, this will cost more time and money to produce each of these reports and also delays a solution being made.</p>
<p>The other major concern is also the public amenity being reduced or impacted. Nobody would like the beach amenity to reduce in size and option 1 and 2 will impact that. Everybody enjoys coming to beach for a variety of reasons as stated previously in the first question. So that is a major contributor to what solution would be ideal for this location.</p>
<p>Private access to the beach is also another topic being raised. For the residents that had existing staircases to the beach, would staircases be included in the designs for the seawall options provided? These were not depicted in the concept designs in anyway and were not mentioned in any of the reports.</p>
<p>I think the best bet is to put up the promenade wall, but I like the model in Cronulla with a honeycomb shape that refracts wave energy. I worry as I can't see this here. I want waves and sand.</p>
<p>Please hold strong and do not pay for a solution that will only benefit these home owners. They should be paying to protect their homes as we all do.</p>
<p>Let's hope that a sea wall does not proceed.</p>
<p>All levels of government should produce a JOINT statement which Real Estate Agents should be compelled to emphasise: rising sea levels + ocean behaviours will relentlessly erode coastlines. It is sellers' legal responsibility to fully inform ... and buyers responsibility to assess risk and acknowledge private responsibilities for private properties. No public monies for private gambling and greed.</p>
<p>We should no pay for this or accept this and by we I mean the rest of the Central Coast this is a natural thing leave the beach to be a beach would be cheaper to sell the houses and make it a mandatory buyback of all land effected.</p>
<p>A beach and its dune profile is a dynamic system. Nature is not static and the building of a seawall is not going to stop the occurrence of storm waves it will only destroy the natural beach system. Waves are meant to crash onto a sandy beach not a wall. If your so concerned about costs, then the cheapest option surely is buy back the dune houses.</p>
<p>I feel that individual property owners should deal with their own personal beach erosion issues.</p>
<p>Why is there only options around Seawalls? There are alternate options available, including no action and buyback. As a result, this survey is rather bias and potentially unreliable as a data source (particularly around community thoughts towards how the beach could be managed.</p>
<p>Do not build the sea wall!</p>
<p>I think the long term repercussions of building the seawall far out way the aesthetic and greedy Wamberal Beachside living estates. This beach belongs to everyone, and even considering a seawall is so selfish to the general population living in the area.</p>



**Verbatim response – SURVEY feedback**

In addition, looking back on this survey, wouldn't you agree that it is rather one sided, weighted significantly towards the seawall?

The sea wall is not necessary, residence retreat is the only options. Get off the dunes, forgo your views for the good of community and return the integrity of the environment for the community. Assuming other rate payers will fund the capitalisation of your fanciful property portfolio. Council supporting this is abuse of funds and unfortunately not viable.

We need a solution, the beach has been greatly damaged through the recent storms and the solution is for all people who use the beach and surrounds.

I understand the predicament the beachfront residents and Council find themselves in. However, it doesn't change the underlying issue that the property should not be there. The fact we are being asked to choose which seawall option to protect a few well-connected residents and their homes from further damage is a little crazy. You will not hold the ocean back on this stretch of coast, it is a selfish and ego-driven attempt to remain beachfront for one more generation. The cost of a seawall will be a loss of the beach. No matter how you word the options or the questions in surveys, a seawall as per any of the options will result in loss of beach for the community. People want to live and visit Wamberal because of the beach with waves smashing up a seawall you lose you beach, surf breaks and a large section of what makes the area so special.

The fact that construction of homes continues as we speak with more homes being built or rebuilt on this section of sand dune begs belief. Any seawall will be an extreme waste of money and a short-term solution to protecting a few homes at best. The only realistic solution to retain the beach is sand nourishment and a planned retreat from the ocean's edge. Any other place on earth has erosion lines 10 years, 25 years, 50 years etc. The fact these people have built, bought, and been allowed to is hard to understand. But it's done. The sea will keep coming and no sea wall will hold it back on that stretch of exposed coast, it will just move the issue further up or down the beach and it will slowly break down and our children and their children will not have an inch of sand to play on.

I understand that the thought of losing your home to the ocean is a terrible thought but no matter how sad or terrifying or upsetting this is it still doesn't change the fact that these homes were built or bought by people knowing that they are on the beach and within erosion lines and areas that have been affected previously and will continue to be so. That doesn't change. The egos involved need to just look at this simple fact and take responsibility. The community should not have to pay in rates and loss of beach. If a wall is built the beach on that stretch and most of surf breaks will be lost. Maintenance will need to be carried out and any large event will cause damage resulting in long-term costs. The budgets for the build are grossly underestimated and when adding on the long-term costs to maintain and then try to repair after major events it will be cheaper to buy back the homes and slowly return the section to dune and bush. No one wants to lose their home and people beachfront may say, you would not feel this way if it was your home. But that doesn't really apply as myself and 95% of the Wamberal community would not have been blinded buy our egos and quite frankly been stupid enough to have bought or built property on that stretch of sand. If these folks who are fighting for the wall have enough money to help fund building a wall to protect their homes for few years they are going to have enough money to be paid out fairly and go and buy beachfront elsewhere if they haven't learned their lesson or simply don't care. Hopefully, at some point, the community,



Verbatim response – SURVEY feedback
<p>the powers that be, the stakeholders, and some of the owners along this stretch wake up to short-term ego-driven fixes and see sense and compassion for the environment and the beach itself, and the whole community. Being part of a group that destroyed Wamberal Beach for future generations is not a great legacy to leave behind so I'm hoping at some point some common sense kicks in. Thanks. Cameron</p>
<p>It is appreciated that this survey is available. However, I would have liked to answer more questions about alternative options to a seawall (ie. dune regeneration, leaving the beach the way it is).</p> <p>For someone who does not want a sea wall at Wamberal Beach these questions don't give many options to voice their opinion and vote for an alternative solution. The questions are all leading towards a pro-wall decision. Personally, I don't agree with building a sea wall at Wamberal Beach and would have liked to answer more questions about alternative measures and protecting the beach.</p>
<p>Why has there been approval for new housing at Wamberal Beach? I would love to live on the beach but it is unfair that new properties are being built which is only going to make the situation worse. More erosion, more problems. I think we should be more focused on dune revegetation and keeping the sand on our beach.</p>
<p>It's been a year and already sand has been returned naturally don't destroy the beach with solid wall when we don't know the outcome</p>
<p>The wall SHOULD NOT be built in any form. It will disintegrate the beach and the ocean will be lapping again the wall. The beach will be no good for anyone. The house owners always knew that there could be issues and still fought to build. It is their problem which should not effect thousands of others. Also your survey does not give the option of saying no. Why? Because you know no one wants other than a few home owners.</p>
<p>By building a sea wall you will just create erosion at either end, houses should be knocked down never to build on sand dunes ever again. This is a pathetic survey that you think a sea wall is the only way, it's wrong on every angle... environmentally, financially...</p>
<p>OPPOSE SEA WALL COMPLETELY. I WANT THE COUNCIL AND GOVERNMENT TO SUPPORT THE POLICY OF PLANNED RETREAT. IT IS NOT SUSTAINABLE TO PROTECT THESE PROPERTIES. A SEA WALL WILL DESTROY THE BEACH AND TURN IT INTO A BAY. TAXPAYER MONEY SHOULD NOT BE PROTECTING PRIVATE PROPERTY.</p>
<p>Don't build a seawall. You will ruin the beach.</p>
<p>Would prefer that no wall be built at all. Those houses owners bought, knowing the risks of climate change and, in particular, the risks associated with that exact location, and yet expect the general rate-payers to bail them out.</p>
<p>It is not the problem of the tax payer to fund beach front property owners who don't want to fund their own properties problems. It is not the beach goers money that should be spent on people who don't want to help themselves.</p>
<p>no seawall for Wamberal. this needs to give other options to saving the beach then a seawall. if they want to save their properties, do it on their land with their money. too much has been spent already on what is a private issue.</p>
<p>Knock down the houses and create sand dunes restoration! areas. Construction and the seawall at Terrigal has left us with complete beach erosion and no sand!</p>
<p>Sand nourishment is the most important management strategy for Wamberal Beach.</p>



Verbatim response – SURVEY feedback
No wall please.
Please don't build a sea wall at Wamberal. The community is against this. It is only those few properties on the shoreline that will benefit from this. The rest of the ratepayers are paying you to create another Brighton, Ramsgate beach lost to sea walls as was the case with the third runway. The building of a wall at Wamberal will destroy the tourist attraction to Terrigal and Wamberal. It will destroy the natural beauty of the area. It will affect the wildlife, sea-life, bird life and just about every aspect of the pristine beauty of the area that is not only a drawcard to the area but also a precious part of our coast.
I have lived at Wamberal for over 20 yrs. It is disgraceful that development of residences continues to go ahead on the beachfront. The vast majority of Wamberal residents are strongly opposed to a sea wall. It is completely unreasonable that our beautiful beach could be jeopardised in order to protect a few, who were all very aware of the risks of building on a sand dune. All my research has lead me to strongly believe that a Seawall will permanently destroy our beach. Those who make the decision will be held accountable.
I live in this suburb, I want a safe beach with hazard removed, including building materials from the erosion.
Where is the option for no seawall? Why are there large scale developments still going on?
If this wall goes ahead it will be a complete disaster for the beach as we know it! It should never of had homes built where nature had put dunes to deal with large seas etc. The government should buy the homes back & reinstate the dunes. A wall along this stretch of beach will destroy it for everyone who loves it. Yes please. As previously mentioned, we have had a revetment wall in place since 1974 - we do not understand why our wall design was not highlighted by the coastal engineers as being a good structure. Also why has the CC Council not permitted folks to protect their own properties?
Beaches have existed for thousands of years without sea walls. Sand comes and goes, beaches form and re-form. Any Seawall will destroy the beach and represent vandalism of a beautiful public amenity. The pictures and diagrams of the Seawall options are very misleading; they should all depict a wall with no accessible sand.
Action is needed..!
Why are there only options to build a wall and to not leave it as it is. I have lived on the street for 45 years and the family since it existed. It's the houses that are causing the erosion of the dunes.
No.
As a local resident we don't want a sea wall. Where is that question? You are spending unnecessary funds to protect a few. Buy the particular homes affected and turn into park area for the local community. Stop extending money to the few people involved. The beach if for everyone not a chosen few.
Leave it as it is !!
This area is a long term community resource that is the responsibility of all levels if govt using our taxes to protect the area as they do with national parks etc.
I am against the sea wall in general and would prefer staged retreat but if it is the only option then it should be built as far into the dune as possible to cater for rising sea levels and increased storm activity due to climate change. If there is an ability to force the property owners to give up part of their land to protect the beach and property I would support it. The risks of erosion of these properties have been understood and accepted by all parties for many, many years so giving up a bit of land that they would eventually lose anyway doesn't seem a bad deal to me.
Save/Protect the houses, surf club and land and keep the beach/sand and ocean too.



Verbatim response – SURVEY feedback
<p>Without proper roundabouts at busy junctions, guttering, safe road crossings, new tarmac and storm water drainage in Long Jetty, I wonder why these Council resources are not being extended to more community-wide projects. A focus on shoring up a handful of multi-million dollar homes on a narrow spit of land to preserve their disappearing beach front seems wasteful. These houses should never have been built where they are; certainly it is time for the owners to rebuild much smaller houses or move elsewhere.</p> <p>This beach is not accessible to the public. It is basically a private beach for millionaire homeowners who want the Council to further enhance their lifestyle on a private beach.</p> <p>I think the sale of the land on top of sand dunes is absolutely moronic. What is even more foolish is building a multi million dollar home on those dunes and crying poor when the inevitable natural elements destroy them. I think the land should have been bought back by Council, the houses destroyed and sand dunes replenished.</p>
<p>The property owners along the Wamberal Beach front sued the Council, against their advice, to build on the sand dune. They are now suffering the exact consequences, coastal erosion, that the Council said would occur. The land owners now want the local Council and it's constituents to pay for a sea wall to protect their failed interests. This also at a time when the Council is in crisis and rates have been significantly raised for all Central Coast residents. The land owners should either relocate or fund their own properties structural protection. These dunes should be regenerated to their natural state which includes their erosion over time.</p>
<p>Central Coast beaches are lacking when it comes to accessibility and aesthetic. Many are lovely but have access issues. A promenade for the entire community to use would be the best use of the funds and the best way to remediate both the environmental issue and the owners / rate payers.</p>
<p>Just leave it alone and stop trying to control the natural movement of the sand to satisfy a bunch of wealthy property owners who are not considering the impact their monstrosities are having on land and ocean they do not own. Plain stupid houses were built there in the first place. Walk up to spoon bay and see how the entire beach should and could look.</p>
<p>A Sea wall should not be built at the detriment to the wider community - those who both approved the buildings and built the buildings should be held accountable with the full costs attributed to those parties. This is NOT a burden that the community should have to pay for via monetary means or natural amenity loss.</p>
<p>The owners built there, they are responsible.</p>
<p>The community have been misinformed and it's disappointing that Wamberal do not want a sea wall and that only one option has been provided to the community to address the coastal erosion issue. Further options should have been made available to the public other than a sea wall that will be detrimental to our local beach. Council have failed to adequately represent the community on this matter. Survey is biased towards a sea wall and is not representing what the community actually wants.</p>
<p>Coastal erosion is known to happen and while it is unfortunate that people have had their properties damaged due to this, they should have the adequate insurance protection to cover themselves. It is the home owners responsibility and obligation to maintain their own property and protect it, not the Council's or other rate payers. These are multi-million dollar properties that have been effected and the owners of these properties will have the capital to address these issues and appropriate insurances. They just don't want to go into their own pocket. The rest of the coast should not have to pay to protect their mansions!</p>
<p>Forget the seawall, get rid of the properties on the beach front causing the problem.</p>



Verbatim response – SURVEY feedback
I would like to know why this atrocity is being pursued at all. It's short-termism at its worst. Wait until the whole of the Woy Woy / Umina peninsula is going underwater - you'll regret putting this stake in the ground at that point. You can't stop nature and sea level rise - the houses should never have been built and can't be protected in the long run (ie. 100-200 years). Time to relocate them and stop this madness which will just cost us more in the long run.
Can't emphasise enough that the beach is for the community and not the home owners. The wall has to be built to meet community needs and not to suit the home owners. The beach needs to be accessible for all and accessible along the entire stretch from Wamberal Surf Club to Terrigal Surf Club.
These houses shouldn't be on the dunes. The original hoses were beach huts not mcmanions they are now. They are also built on the second entry to the lagoon.
This is disgraceful. How can you even think of putting in a seawall? What a joke! You will ruin the environment and habitat of so many animals and marine life, for a couple of people's houses, THAT SHOULDN'T BE THERE IN THE FIRST PLACE. You should be ashamed.
No.
Why has this Council not asked the community about alternative solutions other than seawalls? 3000 plus people in Wamberal SOS are for preserving the beach and against a seawall at Wamberal. How can this survey represent this view?
This survey has been based on the basis that sand replenishment and a constructed seawall are the only options. This is a false assumption and does not provide a long term solution. It also places all the cost on the Council/government because land owners are not permitted to construct retaining structures on their own land. The Council is probably encroaching on private property. The current escarpment and eroded beach front is not Council land.
I do not feel that the rendered options give a clear indication of the wall options and what they would really look like. I believe the best option would be a buried revetment wall that is covered by sand so that it is only exposed rarely - when there is a significant storm event - but still provides protection for the many properties and infrastructure between the beach and the lagoons.
Why is it that CCC has been forced into this protection plan by NSW Govt. legislation, yet NSW Govt. expects ratepayers to fund it Threatened private properties should not have been built there in first place as these properties are all on the foredune, an inherently unstable zone of beach morphology (Caveat emptor)?
It is extremely disappointing that the taskforce at the previous public consults guaranteed that 'all' options would be assessed and modelled, one option for a Seawall has been put forward again, that has been lobbied by a private company of homeowners, and that sit on the taskforce and are consulted at each meeting. It would be considered that the taskforce has a bias and conflicts of interest.
The community, surf club, board riders club, environmental groups and the broader community have not been consulted other than a survey for one option and specific questions directing to all answers to a Seawall. The designs are for urbanisation of the natural beach and take no account of natural and nature reserves and lagoons at each end of a proposed and substantial structure. We trust Council will follow the local govt act, their own environmental sustainability policies and the CMP and not adopt an urban Seawall structure that will affect the amenity and environment of the natural beach.
The reflection of waves from the construction of any wall will result in the loss of the beach completely. Benefitting only a small few the impacts would devastate the many thousands of locals and visitors alike who



Verbatim response – SURVEY feedback
use this beach. Adding to this is the inherent danger a wall will pose to both surfers and swimmers if they are swept into it. Wamberal Surf Club will also lose access to this section of the beach placing lives in danger as only limited equipment can be quickly brought to the scene of any rescue.
This is madness. Buy back these houses and give the beach back to the people.
The current houses need to go and the natural dunes need to be re-established. It was criminal to build there in the first place and these houses need to go.
Development should never have been allowed on the beach front to start with and now the public are expected to pay for these entitled peoples house protection. Why is continued development allowed when everyone knows the risks?????
What about the impacts to the residents living on Terrigal lagoon if the Seawall is implemented. The lagoon has erosion and is shallow already with a bold up of sand washing in. Recent king tides and storms have seen more flooding than ever and it too is supposedly managed by Manly Hydraulic Lab. They haven't dredged any sand to maintain or sustain it let alone do the plan for the Seawall too.
No.
Why can't the dune be rebuilt and planted out to maintain a natural barrier?
No.
All photos are misrepresented of the current conditions. Look at what the wall and rock remediation has done to both Terrigal Beach and parts of Wamberal Beach atm. These are not the only options and want to see the raw data from the initial community consultation. Walls ruin beaches and removes the sand. The only community members that want this is the 60 odd residents that have houses along the beach. On many cases those residents fought against Council to have their houses constructed closer.
I would strongly support a promenade seawall at Wamberal as it would create some fantastic public amenity like the new Terrigal board walk which has been very successful and has become an amazing new asset for the area.
Where is the option to answer questions which do not involve building any sea wall? Examples are available all over the world where the construction of a sea wall ruins the beach.
It is disgusting that the community has not been considered in this act of environmental vandalism. Just look at Terrigal and the Haven the beach is all but gone from there.
No.
Seawall concept design options look very strange and do not properly depict the reality of how the options would look. I don't understand how the design options could have significant footprint on private land and should be placed on public land but buried in the sand to ensure the amenity of the beach.



## Social PinPoint - Individual concept design verbatim responses

Table 36: SPP – Wamberal Beach existing environment. Unedited list.

Existing environment verbatim response – SPP feedback
We like the beach as it is. The proposed options are all ugly and invasive. The homes along the beachfront add to the character of the area and don't affect the beach. These homes are legally permitted to be there and the owners no doubt pay very high rates, etc for the privilege. Good luck to them. Council and/or the Government ought to allow the homeowners to protect their properties with buried rocks and suitable vegetation [within their own property boundary] to help stabilise the dune face.
This problem needs more creative thinking. A soft shoreline dissipates energy. Breakwalls direct wave energy elsewhere. The breakwall at Avoca needed more thought. The dune restoration at Kirra is a good example of what works. There has been no consistent effort since 1974 to address the obvious potential to rehabilitate the dune system on this beach.
Should be left as is and houses removed. They should not of been built in the first place. With the houses gone the dunes will look after the beach and other properties.
I like the beach like this but realise during erosion cycles it doesn't look like this.
YOU JUST HAVE TO LOOK SOUTH TO WARDS TERRIGAL AND THE HAVEN AND SEE WHAT SEA WALLS DO TO THE BEACH, NO SAND THE UNDER MINING OF THE WALL IN THE SOUTHERN CORNER EXPOSING RUBBLE AND DEBRIS WITH A DANGEROUS BACK WASH OF SEA WALL. AS SURFER AND A LONG TIME VOLUNTEER OF WAMBERAL SLSC I TRULY BELIEVE SEA WALLS DESTROY BEACHES AND THE NATURAL ENVIRONMENT AS I HAVE SEEN IN THE LAST 40 YEARS TRAVELING AND SURFING AROUND THE WORLD. HARD REFLECTING STRUCTURES DON'T MAKE FOR GO SAFE BEACHES, NOURISHMENT SAND.
The effects of hard revetment are well known which is why they are banned from four US states. They move the problem (beachfront property owners) to the community (loss of beach) and to ends (lagoons and national park) can you demonstrate likely ecological and mechanical effects of these revetments to the public. A literature review would demonstrate this and the denial of this by so called coastal scientist Dr Watson is unconscionable, please have all his recommendations peer reviewed.
If it's accepted an adhoc wall currently exist and sand replenishment would come with a revetment wall, why isn't sand replenishment alone being put forward to the public as an option. This action is reasonable given property owners signed positive covenants which includes a need to maintain the beach, indemnity for Council and is sensitive to Council's current financial position. No wall.
Why is it so difficult for public officials to say no to these beachfront property owners when it's in the community's greater good. Proud of my Council for not allowing building on the dune and they should never have lost in the land and environment court. Why has your position changed? The science hasn't. a seawall means no beach for thousands intergenerationally and essentially leaves the 60 or so beachfront owners with a private beach. Un-Australian.
Keeping the natural gentle slope of the beach and dune is the only way to maintain that critical piece of beachfront as it has been for thousands of years. This is the only solution that will guarantee the thousands of visitors and local members of the community continued access to this section of the beach. Any other solution will eventually erode the sand completely devastating the environment and community alike.
Any interventions simply do not stack up- economically, environmentally or socially. These property owners- who will all more than likely be dead in 20 years- need to vacate this land instead of forcing us plebs to fund





Existing environment verbatim response – SPP feedback
their selfish existence. I will reluctantly pay to compensate them, but I will not fund this wall- the community should not accept their rates being spent disproportionately on these people's private assets at the expense of our own public asset!
This is the most ignorant statement I think I have seen on any topic. 20 years and the owners will all be dead??? Gee wonder if any have children. Get educated then make a comment.
This appears to be a great option. Leaving the beach as it is an not impacting the Natural Environment. Development on and removal of the foredune should be stopped to protect this beach for future generations.
It is a well established pattern that when a sea wall is created it leads to further erosion of the sand located in front of it. Why let the interests of these 60 or so properties outweigh the interests of almost 20,000 people living in Terrigal and Wamberal.
Totally agree! I was a Member of Wamberal SLSC in the 50's and 60's, rode my board all up and down the Coast, got my Bronze in the 80's when women were first permitted. I would hate to see Wamberal disappear as has Terrigal Beach. It really is a crime to build a Seawall when the long term effects are so catastrophic to the environment and so well documented. Flooding at the ends of the wall would devastate low lying properties around the Lagoons every time we had an East Coast Low.
The natural habitat should be allowed to change and morph with time - The cost of removing the houses altogether should be a key consideration. Whether it be Council or State Governments burden removal of the houses at risk is by far the best environmental outcome.
Another vote for restoration and no sea walls please.
Let the natural habitat resolve itself. If the houses need to be removed for that to happen, then that needs to be considered as a viable outcome.
Council will be doing a severe injustice to Central Coast beach users not to mention the potential environmental damage that could be done to the beach, leave nature alone and remove the houses.
Beaches are by nature changeable and in that there is their beauty. When we build too close we have issues. We should be looking how to protect those few homes that are in danger and leave the rest of the beach untouched.
Leave the beach as it is.
The only logical option is for the houses to be purchased as they fall in and the land to be regenerated with trees, so that it looks like North Wambi. The houses should never have been built on the sand, it was never safe, the ocean was always there - simply Stupid Human Greed. If you want to put anything in front of the houses, make it lots and lots of trees, which would have been there prior to the houses being built. As everyone is fully aware, all other options will destroy the beach.
Absolutely! When you are off the shore in a boat you can see the difference in the dune heights; North Wamberal vs South where the houses have cut the top off the dunes. The store of sand would restore itself if the houses were removed!
Absolutely, when you are in a boat off the shore you can see the difference in the dune heights between North and South Wamberal.
We need a solution. The beach and the dune has been destroyed by storms and the Council and State Government has had experts look at the designs, wave action and sand requirements. Do nothing will see the beach and the dune destroyed again.



Existing environment verbatim response – SPP feedback
The only way this will work is if substantially more rocks (or bags of rocks of at least five tons each) are placed on the beach and then an enormous amount of sand is then placed again along the beach. Why hasn't the use of groping been considered??
Leave it the way it is.
Leave as is!
This picture highlights the need for a natural foredune. Notice the surf club has a natural active dune in front of it giving it natural protection. Where the dune has been removed and replaced with housing the beach is eroding. Any wall option will degrade the beach.
This is the preferred option - leave it as is and the people who bought here just have to accept their fate.
Leave the beach the way it is. A seawall would eventually result in the beach / sand disappearing (just how Terrigal Beach has narrowed significantly). Rather than a seawall, I would like to see the natural vegetation and dunes to be restored.
A Sea wall should not be built at the detriment to the wider community - those who both approved the buildings and built the buildings should be held accountable; with the full costs attributed to those parties. The community should NOT be burdened with such environmental and monetary losses.
The beach should be left as is and the houses removed. Nature will take care of itself as is very obvious at North Wamberal where no development has resulted in no permanent damage to the beach. Nature takes away the sand and returns it.
None of these 'improvements' will benefit the community at large. This beach is and will be used by a miniscule number of people and the resources being spent just on investigating this problem, let alone actually implementing any of the ideas, is obscene. These houses should never have been built where they are; certainly it is time for the owners to rebuild much smaller houses or move elsewhere.
Status quo is a dump ... damaged foreshore, unsafe areas and property in disrepair.
The "wall" should be trees, bushes - same as North Wambi. No cement or rocks.
Untrue - <a href="https://coastalrisk.com.au/viewer">https://coastalrisk.com.au/viewer</a>
The top left looks best!!! [existing beach] The Wamberal community do not want a seawall!!! Please listen. I would prefer our beach not look like the attached photo!! It's disgusting.
Why is a wall now the only option? The rocks - why dropped as a temporary solution. Why isn't sand renourishment and dune replenishment now taking place?
Make sure we don't enter into a contract to pay for sand from Westconnex. It is not compatible sand with Wamberal. We would end up paying to take their waste when they should be paying us to take their waste. Tipping fees would be \$200 a tonne for Westconnex. Instead, our Administrator can enter into a contract to pay for their waste and the residents get no say on the contract.
There is plenty of sand in the sea, it will restore naturally. Property Owners should be given the option to protect their property at their cost. Most of the restoration work is not on Council owned land. The legalities of the Council doing work on private land is an issue with any Council intervention. The best engineering solution is buried sand bags, stabilised with concrete and allowing the sand to naturally restore.
There is absolutely no way to justify the negative social, economic and environmental consequences of a wall over planned retreat which anyone paying attention knows was recommended by the most recent cost benefit analysis. Wollongong is streaking ahead of the Central Coast partly because they have kept their



Existing environment verbatim response – SPP feedback
beaches as prime public realm for all to enjoy rather than let them become a Frankenstein's monster for a couple of hundred super rich.
each of the five options talk about the ability to reflect wave energy when they should be looking to disperse wave energy as the sand does naturally already except for where private land owners have built too close to the wave zone creating 'cliffs' that cause waves to reflect and drag sand away.
Absolutely agree with that! What about the option of no seawall and leaving the beach as it is/putting in measures to regenerate the natural vegetation and dunes to keep the sand and the beach?
Agree. The proposed sand would come from crushed sandstone from the tunnelling process, would have to be washed and crushed and would never be compatible with Wamberal sand. Furthermore, there would be silt that would be dumped on the beach along with the sand as no washing process would remove it all. Sand that is not compatible would cause other environmental problems, for native flora and fauna. The silt would make the seawater cloudy and unfit for surfing and all other beach activities.
I believe it best that the beach stay as is leaving the existing rubble that was put there in the storm and allow for sand nourishment when necessary. all the other options need sand nourishment so why change what is there. I went to the first public forum at Wamberal Surf Club and fail to understand how the information was collected as there were no notes being taken by any of the groups in the time I was there. Also spoke to a lot of people afterwards and were all given different information.
This stretch of sand dune is going to continue to experience erosion due to the topography. The suggestion that was most cost effective in a previous Council report was for a planned retreat. There is no justification as to why this is not happening. Anything else is kicking it down the can down the road to following generations. Time to return the sand dune to mother nature. Start the planned retreat and stop the building of new houses that is happening right now.
I'm no engineer but the concept of throwing a man made solution at a man made error seems bizarre. Perhaps let nature take its course - the cost of a few beach front homes is a small price to pay. Naturally those residents should be able to take appropriate action on their own property that is in keeping with the natural environment they enjoy every day.
The design should consider wave dispersion structures placed off shore in the 10m depth. These may enhance surfing and provide protection in major storms by depowering high force waves before they impact the beach. Concrete structures like those used on Coffs Harbour seawall may be suitable.
None of these 'improvements' will benefit the community at large. This beach is and will be used by a miniscule number of people and the resources being spent just on investigating this problem, let alone actually implementing any of the ideas, is obscene. These houses should never have been built where they are; certainly it is time for the owners to rebuild much smaller houses or move elsewhere.
All rock wall solutions are absolutely shocking. Is this honestly the best solutions Council can come up with in 12 months?
Leave the beach as is, everyone who built beside the beach knew the risks why should tax payers have to pay for their greedy mistake.
What about Gabion baskets or rocks buried under the sand as well as on top of the sand.
Leave the beach / sand as it is. Give individual residents the option to storm proof their own beach side border with appropriate community consultation.
The equation is very simple: any sea wall = no beach. There is nothing else to consider.



Existing environment verbatim response – SPP feedback
The only option is to regenerate the sand dunes naturally, with trees, bushes, etc, so it looks like North Wamberal. The ocean has always been there and she has always been a force. It's obvious that the houses should never have been built there, whether legally or not, DUMB! It's time the Environment was considered. Houses can be built elsewhere, once you destroy our beach it will be gone forever.
Yes it would be good to see the supporting documentation from the community consultation.
Will you move the surf club onto the dunes when you build the wall? The Council rebuilt the surf club over 15 years ago and didn't build on the dunes for a reason...but private landowners you keep letting build on the dunes... in the last 12 months have many on the beach front have lodged DA's and had CCC approved?
This is not a solution.
The beach should be left as it is. the owners on the dunes choose to live there knowing the risks. architects have pushed the limits when re designing building right on top of the erosion lines not allowing any give what so eve and Council has approved them, yet they want the public to bail them out. Mankind is destroying the area and won't be happy till it's all gone. Look at what we had and what we have destroyed at Terrigal south end and the haven.
Can we have either sand bags or gabion baskets buried under the sand and the rocks left on top.
Assuming the do nothing approach is taken, Wamberal will lose the beach, lose Ocean View Drive and the power, water, Sewer, NBN, Telco and many homes behind the beachfront homes and on the west side of Ocean View Drive. There will eventually be no access to Terrigal and surrounds, along Ocean View Drive. Why is this not being made clear to the general public and residents of Wamberal?
Why doesn't CCC educate the public that a buried rock revetment is needed not only for the 60 homes but to also protect Ocean View Drive and homes sitting landward of OVD. CCC in their 2014 Terrigal Wamberal Beach coastal hazard map clearly identifies OVD and homes landward of OVD being severally impacted by the 2050 Hazard Line (zRA and zRFC). A buried rock revetment is needed at Wamberal Beach to protect OVD and the landward Wamberal homes as much as it is for the 60 homes along the foreshore.
The do nothing approach has worked so far. The locals say the sand always comes back. So the do nothing approach is working. Perhaps some homeowners may need to move their houses back a little from the effects and impact of the storms of 2020 but overall, even they know the sand returns: Wamberal Lagoon to Lagoon Solution Facebook community page supports this too: · Plenty of Sand Tonight ❤️ At least 30m! Tides always have come up when high and return sand when low. #wambisandcomesback
It seems nonsensical that the general public recommend CCC along with State Gov. to consider acquiring the 60 homes at a cost of \$500mil. And there will still be a need to build a rock revetment wall to protect Ocean View Drive and homes landward of OVD. It seems like the best use of funds is to build a buried rock revetment seaward of these homes.
Council's maps show that Ocean View Drive will be erosion impacted by 2050. How will residents get to Terrigal if the Road does not exist. And who will pay for services to be relocated to serve the Wamberal residents if we do nothing and allow natural retreat. Can we see a map that shows the houses and roads that will go if we do nothing by 2050? Where will the traffic be redirected? If Council do want to protect those assets, then who pays?
The Wamberal SLSC sits as far forward seaward as the property boundary allows. It's setback from the seaward property boundary is as much forward as any of the other properties along the Wamberal seashore.

Existing environment verbatim response – SPP feedback
In fact, the recently added balcony coming off the café actually touches the seaward property boundary! No property along the foreshore, but SLSC, has a structure that touches the seaward property boundary. Have a look at google maps, default.
Consider buying back houses, instead of manipulating with any seawall, and rezoning land to avoid further developments.
Planned retreat is completely unrealistic. The Council has never given homeowners any options to protect their homes in the past. Some form of protection to the dune and homes needs to be put in place. Having nothing done is not an option, at least we have some real expert reports to consider and hopefully a common ground can be found to ensure the beach, suburb and homes are protected.
Why have sand replenishment only as a stand alone option or managed retreat not been put to the public as options? These are internationally recognised and their omission without transparent public consultation makes this proposal contravene Coastal Management Act 17 and SEPP 20. The CZMP is a legacy document using consultation and best practice from 20 years ago. Restart the process under CMP and include all options to the public not just revetment only. This community deserves world's best practice.

Table 37: SPP – Option 1: Rock Buffer revetment using basalt. Unedited list.

Option 1 verbatim response – SPP feedback
Low cost and better visually.
Visually better and less cost to establish.
Save the houses, save the beach.
The issue with exposed rock like in Coffs Harbour and Nelson Bay, is it's just plain dangerous. The needles, glass and bottles that break in among the rocks, who will clean it and how regularly. Council do not have the money or resources to maintain it. The fishing line that gets snagged, and rusty hooks? It's something I have to try and keep our children away from. Why would we want this on our beach for our children? Then there is the obvious it's just UGLY.
The amount of comments asking for buyback/planned retreat is evidence of how flawed the public consultation for the CZMP was. This document approved a seawall under old science without anyone knowing about it. Now people are aware the public opposition to this bogus "solution" is obvious. People supporting these options cannot be aware of the reality that they will destroy the beach and at significant ongoing direct and indirect cost to the wider community.
Destroys the beach and the animal/marine life habitats.
Where's the litter caught in the rocks?
All photos are misrepresented of the current conditions. Look at what the wall and rock remediation has done to both Terrigal Beach and parts of Wamberal Beach atm. These are not the only options and want to see the raw data from the initial community consultation. Walls ruin beaches and removes the sand. The only community members that want this is the 60 odd residents that have houses along the beach. On many cases those residents fought against Council to have their houses constructed closer.
They are all disgusting eyesores. If you build any of them Wamberal Beach is doomed. You don't have to look far to see the devastating effects of seawalls... The Haven and Terrigal! No sand left. Time to look further than your nose. It is the definition of insanity to keep doing the same thing again and again, expecting a different result. Total madness. And who suffers? Our kids and grandkids.



Option 1 verbatim response – SPP feedback
Ugly and a waste of public money.
It is accepted coastal science that hard revetment leads to the gradual loss of beach over time. The true economic value of the beach to the community over many generations has not been adequately costed in consideration of only revetment options. Why has a monetary value been placed on the public and private assets behind the proposed wall but not the beach in front? Why has planned retreat as an option not been costed or put to the public? managed retreat is also a permanent solution.
The houses are built across the erosion line and contribute to the erosion by reducing the ability of sand to accrete on the dune system (natural buffer to public assets. The CZMP says the erosion line can be erased with a wall, this is a mistake (allowing the build of houses) fixed with another mistake (wall). If private insurers won't accept the risk why should public money be used to mitigate private risk when beachfront home owners have signed positive covenants?
Hard revetment this in a dome shape for approx. 1.6km, this close to the waterline as exemplified at Wamberal has been demonstrated scientifically and experientially to lead to the gradual loss of the retained beach in front. This effect is described in the NSW guidelines on seawalls and was described in the Marsden 2016 report. How is it Dr Phil Watson and Council can deny this effect without releasing the raw modelling and supportive evidence to the public to support claims of a retained beach?
The impact to the beach will be that of a breakwall with the waves reflecting off the large stones. This process erodes the sand which will eventually result in the loss of the beach completely. If this was to occur it would devastate the local community and visitors alike. Adding to this is the inherent danger a rockwall will pose to both surfers and swimmers if they are swept onto the rocks. Wamberal Surf Club will also lose access to this section of the beach placing lives in danger.
By far the worst option. Ruins aesthetic of the beach and it's appeal.
This option and the two tiered walls are by far the ugliest and ruin the aesthetic of the beach.
How will the natural fore dune be able to rebuild with this option. This also creates a hard barrier that will most likely erode the beach to a very narrow and unusable strip of sand as has happened at Terrigal.
All of these options are badly flawed and will destroy our beach at the benefit of a small number of beachfront houses. I note that you except the ruling of Smart in 1987, and that the seawall constructed for "Manyana" was flanked causing end erosion. This will also happen to any seawall of the designs shown and create devastation at the end of these walls. We are sooo lucky that we did not get finance to build the sea bee wall 20 years ago. Nothing has changed. Leave our beach alone.
The value of the beach from Terrigal to Wamberal is incalculable in its benefit to the public. All local businesses rely on tourists for their main income and without a beach, Terrigal to Wamberal becomes a Bay - not a Beach to which families will come with their children to play and spend money locally. Our Accommodation industry, houses, units, hotels, motels, would be annihilated, also restaurants, cafes, bars and supermarkets. Planned Retreat must be a big part of future planning.
Anyone who has been to Noosa knows what this will do to the beach ie. remove it, and they have a permanent and costly sand replacement system. Not an option!
Looks ugly, is expensive and potentially dangerous to beach goers. As a Wamberal surfer I would not like to deal with a foreshore like that with a decent surf running.
Eye sore!

Option 1 verbatim response – SPP feedback
This is horrible. Not much else one can say really. Take the wall and houses away and one has a beautiful beach. All made by Mother Nature.
Horrid.
In order for a rock wall (Basalt or sandstone) to be stable the individual rocks or rock bags need to be at least five tons each or they will be moved around by big surf.
I don't believe that this will work to prevent sand loss and will lead to long term erosion.
The science says that without major sand replenishment all walls options would result in the complete loss of beach by 2064. The cost of replenishment must be made public as this reflects the true cost of this "solution". CCC says planned retreat is too expensive? Please explain how it could possibly be more expensive than never-ending sand replenishment?? My house doesn't even have sewage connection yet we're expected to pay for this luxury homeowner welfare. We won't.
The only worthy option is not listed, so this CCC process is flawed. The only acceptable option is the protection of the beach through the restoration of natural incipient and primary dunes/processes which are undermined by about 12 large homes that are unviable, perched too close to the beach, undermining the capacity of the beach to maintain a healthy sand budget. Where is the dune rehab plan? Negotiate and selectively relocate unviable homes. Don't push private externalities onto the public.
Who came up with the rating for these completely subjective and qualitative metrics like visual amenity impact and beach access?
Agreed. All of these options are disgusting and will turn a beautiful, natural beach into an ugly one. To benefit of who exactly. It is time for a planned retreat.
What's this at the top of the rocks? Is it a walkway? Maybe make it 2m higher here so the houses are well protected and don't get any salt spray on them?
This render doesn't reflect what is written in the report. The report says the wall will be covered over 90% of the time. It also looks higher than is suggested in the report if the beach in most cases at the bottom of the steps to the properties is at RL+4, and the wall construction starts at -2. Then the wall above is only 2M above the beach, sloping back and mainly covered with sand and vegetation.
All these options show a Seawall with a beach. This is very misleading and biases the survey. The only realistic pictures would show a wall with no sand.
The picture doesn't show that this design will be under the sand for 95% of the time so providing a nice slope of sand for nearly all the time. It will be only exposed with storms. Still an improvement on the current position.
Isn't it showing the part that isn't under sand?
this is ugly! but no stairs to wash away!
This illustration does not represent the real world height difference between the beach and the residence backyards. The current drop is 5-10 in parts. This looks like 2m at most. Is sand being imported to build up the height of the beach?
The simplest and most efficient option would be to compulsorily acquire the most at risk properties, remove the houses, and allow the dunes to repair themselves. The cost of doing this would be far less than building any of these sea walls! While there is some talk of community benefit, what Central Coast Council is actually

Option 1 verbatim response – SPP feedback
proposing is that 144000 dwelling owners fund the needs of 10-60 house owners on Wamberal Beach! This does not seem fair/just in the slightest, a court may agree!
The use of rock is far better than concrete. Rock is flexible where concrete is more ridged and does not allow for the movement of sand. On a beach you are faced with normal wave action, then there are East Coast lows combined with high and possibly king tides. What about high rainfall within the residential areas? Where does the water from rainfall that percolates through the soil drain? I believe it could work its way through the subsurface and drain to the ocean.
The use of rock especially Basalt is preferred over Sandstone as far as structural materials is concerned. Basalt has a density of 2.9 (2.9 tonnes/m <sup>3</sup> ), where Sandstone has a density of 2.42 (2.42 tonnes/m <sup>3</sup> ). The denser the rock the more weight to the structure. I have designed and built many rock revetment structures over 39 years working in river and floodplain management, and the more weight the better the structure. The structure must have a good foundation which is essential for longevity.
Considering the height of the current erosion scarp, how realistic is this image. How far does the rock protrude onto the beach? With the projected increase in storm surges and sea-level rise, this wall could be overtopped and become useless in protecting anything, reducing beach amenities.
Class Action. C'mon Hughie let's go!

Table 38: SPP – Option 2: Rock Buffer revetement using sandstone. Unedited list.

Option 2 verbatim response - SPP feedback
If there is an option that this wall can be used and buried so that it is not intrusive. I think that would be a good option.
Option 1 and 2 are the only real option. The other 3 options opens itself up to vandalism and will be subject to extremely high maintenance costs.
Like
Same as option 1, will be under sand 95% of the time so it will not look like a quarry. Not my preference but still an improvement. Cost is the lowest but maintenance the highest and we expect it to be there a long time.
Hopefully this option could be buried.
The 2 rock-wall solutions look the best. The wall will be buried by sand and they will provide stability to the dune which will protect the beach for everyone.
If we are unable to support a buried solution. Sandstone would be my preferred option.
This render does not fairly reflect the findings in the Stage 3 Seawall Concept Design Options pg. 20 of the report provides a cross section of the rock revetment and beach profile and it clearly illustrates the wall being buried more than 93% of its existence on the beach. A buried rock revetment with native vegetation growing over the top is the best solution if the goal is to keep Wamberal Beach and dune looking natural.
A buried rock revetment already exists across the northern end of Wamberal Beach, immediately south of Wamberal SLSC. It is buried, covered in natural vegetation and you would not know it is even there unless you look closely. It is the best option to keeping Wamberal Beach looking natural. Sand replenishment here is as good as anywhere along Wamberal. And the surf out front is some of best along the beach.
Please no rock, it's a nightmare in Coffs Harbour & Nelson Bay its full of broken glass, line & rusty hooks, the rocks under Terrigal bridge are littered with needles as it is, we often have to clean it ourselves to





Option 2 verbatim response - SPP feedback
protect our Coasty children. Council do not have the funds to clean/maintain a rock revetment regardless of the mineral basalt or sandstone. It's not fit for families or accessible. Dredge the Terrigal lagoon, prevent flooding & reuse the sand on beach or build promenade so its fit.
Destroys the beach and the animal/marine life habitats.
This is a farce. The pictures convey the idea that these revetments will maintain the beach berm and cusps, whereas it is highly likely the beach will shrink within a few years, eventually disappearing. Also, none of the revetment options call out the fact that a revetment in one section of beach will transfer wave energy to adjacent beach areas, spreading the problem. Council is bankrupt. I request an interview with the relevant CCC decision-makers. This process is run by engineers.
Who wants to have quarry for beach?
The impact to the beach will be that of a breakwall with the waves reflecting off the large stones. This process erodes the sand which will eventually result in the loss of the beach completely. If this was to occur it would devastate the local community and visitors alike. Adding to this is the inherent danger a rockwall will pose to both surfers and swimmers if they are swept onto the rocks. Wamberal Surf Club will also lose access to this section of the beach placing lives in danger.
This is a reasonable option. The waves will only very rarely reach the rock wall. And at least the rock will erode into sand. The cost should be minimal because it would be funded by the residents - it is on their land. The issue would be excavating to provide a foundation of rock that would not be undercut in a storm. A better option would be to bury some sand/1% cement bags and allow the sand to restore naturally. This is proven technology, low cost and very effective.
The comments that houses must be removed is simply not viable or realistic. It would cost over \$500m to buy all the homes back. Whether people like it or not, every home owner purchased their land legally. The fact that Council or government did not address the issues of erosion of the beach 50, 40, 30 or even 20 years ago, is not the fault of the current owners. It's reasonable for someone to want to protect their home, the real issue is the Council refusing to allow logic solutions to date.
How will the natural fore dune be able to rebuild with this option. This also creates a hard barrier that will most likely erode the beach to a very narrow and unusable strip of sand as has happened at Terrigal.
Wave energy will be transferred to the ends of the Wall, resulting in flooding at the ends of the wall ie. the land around Terrigal Lake and Wamberal Lagoon. How does CCC propose to stop this happening? See Tuggerah Lakes and the ongoing The Entrance Channel problem as an example of nothing being done to alleviate flooding problems in our Lake systems by successive Councils.
This pretty picture of the beach in no way reflects the actual position of the houses in relation to the beach and ocean. There is no frontage for the houses, they sit metres above the actual sand and there is no private land remaining on which to build a wall. If a wall was constructed, it would take away the public amenity by reducing the area available. The danger of a rising tide to people trapped against a concrete wall is horrifying.
Same as my comments on the basalt rock buffer, ugly, costly and dangerous.
All of these options are awful to look at and a total disgrace for the public to foot the bill for. NONE OF THE HOUSES SHOULD BE BUILT THERE. Ratepayers must not continue to pay to remediate an issue which should not ever have existed. Don't build houses on sand. Leave our beach alone.
This is identical to the basalt option. Leads to long term problems of sand removal. Destroys the dune system.

Option 2 verbatim response - SPP feedback
<p>This render doesn't reflect what is written in the report. The report says the wall will be covered over 90% of the time. It also looks higher than is suggested in the report if the beach in most cases at the bottom of the steps to the properties is at RL+4, and the wall construction starts at -2. then the wall above is only 2M above the beach, sloping back and mainly covered with sand and vegetation. This option is workable with some properly done detailed design.</p>
<p>The images shown here are very misleading. Even at low tide, Wamberal Beach is not that wide (anymore). Building a gradual seawall will take a few more metres of beach / sand away. Which has been shown when the emergency rocks were put down in the middle of the beach. During high tide, this part of the beach is extremely narrow. The long term effect of building any kind of sea wall will be the vanishing of the sand and the beach. What about a dune regeneration program instead?</p>
<p>I agree totally, the dune regeneration is the only way to save the beach. Saving homes is important however there are very few owners who didn't roll the dice and throw their property on the dune for views. I don't think it's reasonable to donate the beach to foolhardy gamblers. It's unfortunate but it's not Council responsibility to fortify private folly. Roads safe and facilities behind dunes will be safe, if the dunes remain in tact. Council must represent the majority, not the prosperous.</p>
<p>I've lived at/near Terrigal for over 50yrs. Since all the hard landscaping/revetment work over recent years, the width of sand, anecdotally, has been reducing. the Attached pic taken in August 2021 highlights this issue. Before commencing on any Wamberal options, can you include as part of your impacts assessments, an analysis on the impacts of revetment wall on Terrigal Beach and give us the community some confidence that Wamberal Beach won't be affected in a similar manner.</p>
<p>Who pays for this? This is my preferred option out of the group.</p>
<p>All photos are misrepresented of the current conditions. Look at what the wall and rock remediation has done to both Terrigal Beach and parts of Wamberal Beach atm. These are not the only options and want to see the raw data from the initial community consultation. Walls ruin beaches and removes the sand. The only community members that want this is the 60 odd residents that have houses along the beach. On many cases those residents fought against Council to have their houses constructed closer.</p>
<p>Marginally better than the basalt but still nowhere near appealing.</p>
<p>My 2nd choice as sandstone will erode.</p>
<p>Boulders being placed under previous emergency works at Wamberal didn't work and ended up being washed into the ocean. How will this not happen again?</p>
<p>How would waves refract back?</p>
<p>How would the wave energy be refracted back?</p>

Table 39: SPP – Option 3: Vertical Wall with rock toe. Unedited list.

Option 3 verbatim response – SPP feedback
<p>Destroys the beach and the animal/marine life habitats.</p>
<p>OMG this can never be allowed to happen. Even the beautiful pine trees have been removed. This is sick. Houses to the right hand side of this and other photos are not at immediate risk. It is the homes to the left side that are the problem. There will be no beach after the next few large sea surges. There's no replenishment budget. Where is the dune rehab plan? CCC must start again.</p>



Option 3 verbatim response – SPP feedback
Ugly, waste of money.
This and the other wall option are by far the ugliest.
Nobody wants this wall. Please put more options on the table!!
Looks like a prime target for Graffiti. Will look very ugly very fast.
The CZMP is almost outdated replaced by a CMP. The CZMP was compiled with bias toward Wamberal Beach front property owners views, the whole thing received 3 submissions from Wamberal. Since CZMP there has been a revision of Coastal Management Act 2016 and SEPP 17 to include things such as protecting natural processes. Also since then state gov commissioned Marsden report 16 reported the only cost benefit to the community at Wamberal was retreat. Why is this action proposed under CZMP and not CMP?
Imagine a family with small children playing and not noticing the incoming tide! Imagine being caught up against this concrete monster! The only people to benefit will be the landowners who will gain unrestricted views without having to look at the plebs!
This is hideous!! We go to the beach to be surrounded by the natural world.
Very ugly and costly.
A wall is a horrible idea.
this is looks very, very ugly, how long until it is covered in graffiti. If you like the sensation of walking alongside a prison wall then this might work. Apart from that the sand will most likely be washed away as has happened at Terrigal. Removing the foredune to build a wall seems very environmentally destructive.
I do not want a sea wall at all. It would be disastrous for the beach and those who love and use it.
A disastrous option for the beach. No evidence of beach protection.
The reflection of waves from the wall will result in the loss of the beach completely. Benefitting only a small few the impacts would devastate the many thousands of locals and visitors alike who use this beach. Adding to this is the inherent danger a wall will pose to both surfers and swimmers if they are swept into it. Wamberal Surf Club will also lose access to this section of the beach placing lives in danger as only limited equipment can be quickly brought to the scene of any rescue.
Functionally, a seawall is a disaster for the existence of a beach. A sea wall might protect these 68 millionaires houses, but at the expense of millions of people's right to access the water. An additional phase should include an independent review of the environmental impacts of any sea wall, with a chance to comment on the appropriateness of the scientific rigour of any impact statement before any construction is allowed to begin.
From nice to ugly.
Definitely not, our sand will be lost.
No.
No way.
Ugly and not proven.
My least preferred option. Has the smallest footprint so keeps the depth of the beach but takes away from the gentle slope of the tune.
Why are rate payers being asked to fund a sea wall which protects a few properties build to close to the beach. It should be up to individual property owners to fund their own land defences subject to DA approval.



Table 40: SPP – Option 4: Vertical Wall without rock toe. Unedited list.

Option 4 verbatim response – SPP feedback
While this height is more representative of the real world. This is extremely ugly. And no will ever visit / use the beach again.
Seawalls don't absorb the waves energy, they just deflect it. In an event of an ECL where all of the sand is removed from in front of the seawall, much of the force of the waves energy is moved to the ends of the seawall. In this case Terrigal and Wamberal Lagoons. Wamberal Nature Reserve, (National Park), on one end... hundreds of homes surrounding Terrigal Lagoon on the other. Pure madness.
Destroys the beach and the animal/marine life habitats. Houses should be removed.
Ugly a waste of money.
The reflection of waves from the wall will result in the loss of the beach completely. Benefitting only a small few the impacts would devastate the many thousands of locals and visitors alike who use this beach. Adding to this is the inherent danger a wall will pose to both surfers and swimmers if they are swept into it. Wamberal Surf Club will also lose access to this section of the beach placing lives in danger as only limited equipment can be quickly brought to the scene of any rescue.
So dangerous! A rising tide could so easily trap people against this monstrosity. No more evening strolls along the beach!
Very ugly and costly.
Agree wholeheartedly! The impact on homes around the Lagoons would be enormous. Flooding occurs on a regular basis and the lagoons have to be "let out". The energy of the waves going into Terrigal Lake has been observed in 2016 when waves broke up as far as the Clan motel and through the restaurant. That would happen every time an East Coast Low thundered through and many homes would be flooded in low-lying areas around the lakes, not just lake frontage.
Are you insane? Walls of this type have been banned in many places around the world, because they cause more severe erosion than leaving the beach to natural causes.
Again, this is so very ugly!
Looks awful.
Beach access to houses should be removed if any of the walls are to be built. Steel ladder/ stair access its a poorly executed idea with an even worse visualisation to match.
This design is oppressive and overbearing.
Absolutely not, eventually the beach will disappear and you will have a nice wall for the beach home owners and no beach for the majority, just look at Terrigal at high tide combined with a reasonable surf running.
No sea wall.
An environmental disaster for the beach and the Wamberal community.
Looks like a prime target for Graffiti. Will look very ugly very fast.
Support revetment wall - as promised for many years... to save beach/ open for visitors and tourists/ support local businesses - and protect public infrastructure (roads/ sewerage/ power/NBN/etc). Funding, of course, important. Could be shared with governments/ Councils and residents. We all pay a bushfire levy. Why not a level to protect our major asset/ attraction - the beaches.
Aesthetically not desired.

Option 4 verbatim response – SPP feedback
This Option would most likely result in the eventual total loss of sand on the beach. It has no regard whatsoever for trying to maintain natural beauty or ecosystems at all. It looks like a prison yard wall.
Why don't we have beachfront land owners listen to the Council rulings instead of taking them to court? Why don't we have everyone support not to build on the beachfront and save the sand dunes so that they can do their job? Don't put a revetment wall in that needs constant repairs and maintenance and still needs to have sand nourishment. Look south to Terrigal and see that the major asset and attraction, the beach, is not what it was since the walls at the haven and the beach went in. NO LEVY.
No way.
All the vertical seawall options I do not agree with. The sand will be lost and the beach ruined to protect a dozen houses.
Various wall options on other NSW beaches have created huge issues at the end of the wall where the oceans energy is released. It is assumed the same issues will happen here. What are the expected erosion issues at the ends of the wall and at Terrigal and Wamberal lagoon openings? Two potential options: 1. Build up / Close up increasing water build up and flood potential at the back of the lagoons. 2. Completely open up leaving surf to freely enter the lagoon exposing homes to wave action.

Table 41: SPP – Option 5: Tiered Wall with promenade. Unedited list.

Option 5 verbatim response – SPP feedback
With all other options being dangerous or costly to maintain, this is the preferred design for my family. It may be a high cost initially but less maintenance cost with ongoing cleaning of basalt, sandstone, or graffiti on a vertical wall. I will not let my children play in among rocks, with broken glass, rusty fish hooks, needles - like in Nelson Bay, Coffs Harbour. If the rock toe is usable, accessible and increasing foot traffic there is less-like opportunity for vandalism and riff-raff.
I think this a great design including the walkway for locals exercise! Look how successful the Terrigal board walk is now. A lot safer than walking on the main road, it protects all the Wamberal properties!
I think option 5 adds to the environment in addition to the value of a seawall. It would improve access to the beach for people of all ages and mobility. It would be a tourist attraction for the area.
Great idea! Myself and many members of the community have always discussed how a promenade was needed. Seen effective on the Gold Coast. Makes sense to build something that'll last!
Great option to allow visitors and locals to walk along the beach wall.
Best of the 5 options by far. Either this, or no sea wall the preferred options. The rest are neither here nor there.
I think this is the best of the options.
A promenade would be a great attraction for the area and would be well used by the locals.
Would make the Wamberal foreshore a unique Australian beach. There is nothing like it anywhere. The best of all options.
Shared cycle path access into and from Terrigal would make sense.
Out of the options this is my preference.
Great for running and walking without worrying about cars and roads! The public should get something out of this!
If there is no option to bury the wall. This is my choice.



Option 5 verbatim response – SPP feedback
Amazing. Will allow people of all abilities to enjoy this stretch of beautiful beach.
I live at 35 Ocean View Drive and think this type of structure would be the best alternative to what I already have in front of my home. Why has no-one suggested the type of structure in front of my home as the standard. It has been in place since erected in 1974.
The best of the options presented, however the environmental engineering problems still exist - as the hard wall is still present. Trapping sand is the key to stability - options that do not include natural sand traps will ultimately never be long term solutions.
None of the options are suitable.
Great thinking, expensive but it would be worth it and you get what you pay for, Wambie Beach is never that crowded as the surf is always rough and rippy. The esplanade would be perfect for the community as it allows everyone access to be able to walk the length of the beach, whilst preventing houses slipping into the ocean.
Will provide much improved experience for all people who visit the beach. People with a disability will be able to enjoy the beach walk and the elderly. Lowest maintenance bill on a yearly basis. I think this will become a model for similar beaches along the coast.
I think if all rate payers on the coast have contribute to paying for a wall to save these 68 houses then we should get something beneficial in return. That's why I think the promenade option is the best. All the other options seem to only benefit the home owners in saving their houses from storms.
If it is to be built it should include a promenade as the success of the one at the Haven has been amazing and allows the general public easy access to a great amenity.
I am opposed to all the proposed Sea walls. I have been a resident of Wamberal for more than 20 years. I have enjoyed Wamberal Beach during these years surfing, walking my dog and walking from Wamberal to Terrigal along the sand. I believe that the community voice has been ignored when facing this issue. My opinion is that the beach is for everyone. The houses that are falling into the ocean need to be demolished and returned to dunes. No more buildings should be approved on that stretch of land.
The best of a bad bunch.... at least a Promenade will improve accessibility and add something to the beach. Rather than detracting from it and just dumping rocks over it.
This will look great, provide a walking/running path from Wamberal to Terrigal. This will keep a lot of runners, walkers off busy Ocean View Drive creating a safe alternative.
If we have to protect rich people's houses then this one - the others look terrible and do not benefit the community. What would happen on really stormy days though? I assume the would be inaccessible. Also, the price for these houses will sky-rocket. Please make sure home owners are paying for this privilege at least 80% of the cost like they had to in the northern beaches.
I like the idea of a promenade as it makes the beach more accessible and the money spent benefits all the community not just the Oceanside residents. It would definitely encourage walking and recreation, I love the idea.
This option appears to encroach on the beach quite a distance. The lower walkway would become unusable as the beach would most likely erode and disappear leaving the walkway metres above the sand level. If this option was to be adopted it would make more sense to have the pathway at the top of the wall as the beach will soon be non-existent.
The top of the wall will be on private property.



Option 5 verbatim response – SPP feedback
<p>The reflection of waves from the wall will result in the loss of the beach completely. Benefitting only a small few the impacts would devastate the many thousands of locals and visitors alike who use this beach. Adding to this is the inherent danger a wall will pose to both surfers and swimmers if they are swept into it. Wamberal Surf Club will also lose access to this section of the beach placing lives in danger as only limited equipment can be quickly brought to the scene of any rescue.</p>
<p>After a few years of storm surges, it will be goodbye beach. This photo presents the lie that the beach berm and incipient dunes will not be undermined by the wall. They will. Many other homes on the right side of the photo are not at risk. Start again. Hands off our beach.</p>
<p>Destroys the beach and the animal/marine life habitats. Houses should be removed.</p>
<p>The public uses the natural walkway, the beach which is accessible currently 100% of the time. If this hard revetment is modelled to reduce this amenity could you please release this modelling to the public. A walkway does not compensate for loss of accessibility on the beach. This proposed coastal action does not comply with the coastal management act 2017 or the SEPP 2020. please also make the predictive modelling of the likely mechanical and environmental effects (wall) at both lagoon's public.</p>
<p>This is an unrealistic picture which assumes the beach would about the wall with no need for a hand rail. In reality sand levels would vary and people would fall off your wall like humpty dumpty. Who assumes the risk for this along with the increased risk to the public of being caught between the water and wall? If it was funded 80:20 such as the Collaroy example would beachfront home owners assume 80% liability?</p>
<p>Any "improvements" in beach amenity need to be considered against the improvements that would be realised by planned/managed retreat, not just against the dire existing situation created by 60-odd selfish wankers.</p>
<p>The CBA must consider the loss of value to our (Central Coast ratepayers) homes and loss of revenue to our businesses caused by the wilful destruction of this major piece of recreational and tourism infrastructure. The overall effect on the Central Coast economy will be significant and unjustifiable to save 60 houses on clearly unsuitable land. Not to mention the major social, environmental and economic benefit of returning land back to the public use.</p>
<p>Most people actually don't want to walk along concrete walls, they come to the beach to walk on sand and build sandcastles with their kids, to surf and ride their boards onto SAND, not concrete.</p>
<p>How is the level of the path decided in this option? The sand level is obviously dynamic and would move between covering the path or dropping away from the edge of the path.</p>
<p>You cannot seriously be thinking of putting a concrete wall the length of Wamberal Beach. Are you planning on doing the same for the whole East Coast!!!</p>
<p>Any seawall will destroy our beautiful beach. Reflective walls are NEVER the answer and this had been proven so many times all over the world. Why is a seawall (of whatever shape or size) the only solution that is being investigated? Wamberal Surf Club has proudly patrolled this beach since 1950 and has not been permitted to have input into the decision process. This is a total disgrace!</p>
<p>Probably the second best option [best being controlled retreat]. However, if this option is adopted, please ensure the funds for the entire project are available. With G Councils present situation, it is easy to imagine the wall going in and then surprise, surprise - no promenade. Also easy to see the Narrabeen issues where wall half built and residents won't pay!</p>
<p>Just received my new rates bill! How can Central Coast Council afford any of these options? Hope the 68 houses are contributing substantially towards this!</p>



Option 5 verbatim response – SPP feedback
The worst of a bad bunch.
Walking along the beach, in its natural state far outweighs walking along a concrete path.
When the sand gets pulled away then the bottom walk way will become a ledge. Whilst it has been dressed up nicer than the other option's, at the end of the day it is still not a natural look.
There are many bodies of evidence that demonstrate sea walls in any capacity do not work. Only leading to further erosion and reducing habitat for native flora/fauna. In this scenario the proposals (whether it be wall, rock, promenade) are all designed to use tax payer money that will benefit only the home owners. A promenade requires complete destruction of remaining dunes and habitat which would be devastating. Other options such as artificial reef/planned retreat must be considered.
Private access to the beach should be removed entirely. Equitable, public access should be provided at existing public access routes.
Very ugly and costly.
Other Central Coast rate payers should not have to cover the cost of whatever design is used. If the Council wants to go ahead it should be only on the basis of the effected Wamberal rate payers covering all costs and future maintenance expenses. If the State Government want to assist with a grant it should not be accepted at the expenses of other more necessary infrastructure such as roads. The Wamberal residents effected bought these properties with the knowledge of the erosion issues.
Looks like a prime target for Graffiti. Will look very ugly very fast.
This option is completely ridiculous. Issues: Graffiti. It will look like Bondi. The first storm will undermine the structure and we will have elevated walkway with no sand on the beach. Conflict between residence and beach users over who can use what. Kids are going to injure themselves when they wash up into the wall during Nippers. Where will Wamberal SLC (and Nippers) move to when there is no beach to use?
Absolutely not, eventually the beach will disappear and you will have a nice wall for the beach home owners and no beach for the majority, just look at Terrigal at high tide combined with a reasonable surf running. At least it has a promenade but it is still a wall that will cause the loss of the beach.
This option would leave the promenade subject to random (increasing) storm events being at such a low level. It seems the promenade is set at this level to protect the privacy of the beachfront homes, but a promenade at a higher level - eg the Terrigal to Haven boardwalk - would allow it to be used in almost all conditions. This option only seems to benefit the beachfront land owners, not the general community. It still doesn't address the need to dissipate wave energy rather than reflecting.
Option 5 is a commercial concrete wall and walkway, out of step with the community request to keeping the beach and dune looking as natural as possible. A buried rock revetment with native vegetation growing over the top that already exists on the northern end of Wamberal Beach, immediately south of the SLSC, is a better solution. It is buried, covered in native vegetation and unnoticeable. And it can be built along the entire beachfront at a cost of about \$15m vs option 5 at \$40mil.
Where is the natural environment it looks like a skate park.
Option 5 is amazing!! Spend the money and build this promenade, please! Well done! This will bring so many benefits to the community as well as provide protection for beachfront home owners. Fabulous. Thank you!



Option 5 verbatim response – SPP feedback
I like the idea of Option 5 as it is the only one that has a promenade. The cost would be worth it, so the beach would have easy access from Terrigal to Wamberal for all ages & disabilities to enjoy & use, like they do now with the new Terrigal boardwalk. This could be like a continuation of this & would benefit both businesses & tourists, as well as achieving better accessibility for residents. It would open up the whole of our area, whilst also protecting beach front homes.
I like this option as it provides public benefit particularly for families with young children, the elderly/disabled who would be able to enjoy a walk along a beachside promenade other than Terrigal.
It would need to be a bit higher to protect people walking on it in high swells, at least 2 meters above current dune levels.
Promenade needs to be much higher than shown in diagram. that will be under water in high swells and will have people swept off it. Raise it up to the level of the stepped area in grey.
Does this mean that you could walk along the wall? If so, this is the only one I would support. All others only benefit the home owners, and not the ratepayers in general.
If option 5 goes ahead is it possible for Council to place a lien on each property such that when the owners financially benefit from the development, such as at sale, Council is paid a proportion of that benefit.
Why should the CCC ratepayers in general meet any of the cost for these remediation plans starting cost about \$26 million and up? Normal household insurance is a cost of the property owner, who receives the benefit of that insurance. I see these options as a form of insurance, simply very expensive insurance. Spread across a large no of properties (say 50-100) along the beach, this is not such a punitive option. Buyer beware was and still is appropriate.
I don't believe you would be able to walk on the wall as I don't allow the owners would allow their beach front land to become beach front reserve.
Please provide adequate safety wall to protect Wamberal Beach houses, that is cost effective long term with minimum impact to the beach.
A terrible option. Just as Terrigal beach has disappeared with their wall that is what will happen here. Leave Wamberal as a natural beach. We don't need it to be an extension of Terrigal, nor do we need the disastrous impacts of a sea wall.
The wall with promenade option not only benefits the beachfront land owners but the whole community. Even though the cost to build is high the community benefit is also significantly higher. Like the new boardwalk at Terrigal this walkway would be a valued feature to our coastline for everyone to enjoy. I would be interested to see just how much more expensive this option would be against a sandstone or basalt wall option.
This is the best solution - enhances and improves the public amenity. Make the wall higher and curve outwards to deflect storm surge waves. Fund totally by State Govt for construction and maintenance. It is the NSW coastline and the wall protects all the behind dune infrastructure of roads and businesses so it is a whole of community benefit. Residents whose real estate value increases should pay an annual levy to NSW Govt. Sand nourishment essential. See pic for how to do it.
If there is going to be something it must be effective so this looks like the best option as it also gives increased public amenity and is not fundamentally only of benefit to the land holders. Clearly the cost is an issue so unlikely to be achieved in the short term. The other options are both unattractive and of less actual benefit.



**Option 5 verbatim response – SPP feedback**

This has a better amenity however, I do not see enough scope for wave refraction. Cronulla has a good model.

The best option, how will wave energy refract back? Will it impact wave shape? Will sand nourishment be ongoing?



## Appendix B – Verbatim questions submitted upon registration for the online Community Information Sessions

The table below provides a complete verbatim account of the questions submitted upon registration to the online Community Information Sessions. Not all registered participants submitted questions. Participants were able to ask more than one question. These questions were read aloud (or summarised if extensive) and answered during the online session to which they were submitted. Some of the questions were answered during the course of the presentation and attracted limited discussion. Other points of contention were discussed at greater length following the presentation.

There were a total of eight sessions offered across a two week period offering potential for a maximum of 400 participants. The total number of attendees to the online Community Information Sessions conducted throughout August 2021 totalled 22 out of a possible 41 registered participants.

Table 42: Pre-submitted Questions –Online Information Sessions. Unedited list.

Questions		
<b>Session 1: Wednesday 18 August 9AM</b>	Registered: 4	Attendees: 3
With the exception of the wall designs shown, what other remediation options have been considered?		
How much value would a walkway along the seawall be expected to contribute to the community?		
Why have coastal management solutions that do not involve hard revetment been excluded for public discussion?		
Why have options such as retreat and sand replenishment only, not been put to the community or investigated scientifically?		
<b>Session 2: Wednesday 18 August 4PM</b>	Registered: 6	Attendees: 5
Why is a seawall the only proposal being considered? Why was a wall the only option considered and recommended?		
Why is restoring the land to sand dunes not an option?		
What specific designs features of the sea wall options are included to trap sand?		
A "planned retreat" is the preferred option in the CZMP, why not Wamberal? Every previous study has rejected a wall, why on this occasion on the back of no study or research was a wall chosen?		
Looking at the irreparable damage the wall has caused at Stockton how can this be considered a viable option at Wamberal?		
How can a "solution" who's only outcome will be the loss of an asset used by thousands of locals and tourists alike be considered as adding value to the community?		
Do the voices of residents in Wamberal matter or just the rich living on the edge of public land?		
Why is there still building debris on the beach, as risk of being swept out to sea or being trodden on, potentially causing injury?		
How can anyone be permitted to build another monstrosity on the sand dune?		
How much did the owner opposite Sal & Co. pay Council to go ahead with a new development in the midst of public debate regarding our beach?		
<b>Session 3: Friday 20 August 9AM</b>	Registered: 9	Attendees: 3
Who will pay for the sand nourishment?		



Questions		
Will the surf be affected and if so, in what ways? What considerations are made for the hundreds of people who will be negatively affected by these changes to the beach and surf?		
Why can't the rocks that have already been installed stay and use sand nourishment as to ensure there is plenty of sand on the beach?		
Who is going to pay for the service? [Sand nourishment]		
Why are revetment walls the only options in the survey? If a wall/structure is built and significant impacts on the natural beach structure and flow of sand occur. Who will be held to account and in what way?		
Why do the only preferred options for Wamberal Beach appear to be seawalls?		
Why isn't a sand nourishment program budgeted for when weighing up the cost of a sea wall versus a planned retreat? Why, when consulted, do the community only get to choose which seawall they want and not consulted when discussing alternative options? Why are Collaroy and Bondi counted as examples of successful sea wall interventions when the context is completely different to Terrigal/Wamberal? Why are there active building sites on the Wamberal/Terrigal dune when they are known erosion zones?		
How do the proposed vertical walls fulfil the requirements of Gosford DCP 2013 Chapter 2.1 - Character Wamberal 1: Open Beachfront "... avoid tall retaining walls..." and "...avoid the appearance of a continuous wall of foreshore development..."? Who pays for the works? Will access to the beach be guaranteed throughout construction if it goes ahead? Why is a seawall the only option being considered? What measures will be in place to ensure the vertical walls aren't constantly being covered in graffiti if this option is chosen? Can you give a 100% Guarantee that the beach will not be washed away or affected in a negative way? Do you honestly think that the vertical wall options are in line with the desired aesthetic and character of the area? If a walkway is to be integrated into a vertical wall would it not be a better option to have it at the top to provide disability access and to ensure useability if/when the sand is washed away?		
<b>Session 4: Friday 20 August 12NOON</b>		Registered: 5 Attendees: 2
Why do we need the wall on the beach if the sand is coming back, let nature take it's course.		
The height of the proposed wall will be up to 6-9meters in height going on current beach level. Is this accurate?		
Re: costings of proposed seawall – do the owners pay 80% of the estimate of the total finished cost?		
What is the estimated width of the beach with a wall?		
What is the height of the beach sand from the proposed wall?		
The scale used on the wall drawings does not seem to be correct from the true heights using the high tide mark.		
Will safety hand rails be placed on the wall for when the beach washes away?		
Is there an opportunity to leave the beach as it is with the rock and rock bag wall and nourishment with sand?		
Sand replenishment - how many times has sand replenishment been used at Wamberal? From where have previous sand replenishment been sourced?		
<i>QUESTIONS below were submitted from a community member who later did not attend the session. These questions were answered by Casey Johnston via direct email with the community member following the session.</i>		
1. Why is a Seawall the only option being given when 4000 people who live in Wamberal are opposed to it on the grounds that science has now proven that seawalls destroy beaches?		



Questions		
<p>2. Why has Planned Retreat not been addressed even though historical evidence from as far back as the 1970's proves that the houses built on the foredunes are at permanent risk of inundation by the ocean?</p>		
<p>3. Why has there been no consultation with the people most concerned with Wamberal Beach? i.e. Wamberal SLSC, Wamberal Board Riders, the Dune Care Group, Wamberal Residents at large? Many of the residents are elderly and not able to deal with on-line questionnaires. They are left with NO Voice in these matters.</p>		
<p>4. Why is the Your Voice Our Coast site set up so that you can only answer which wall do you "prefer"? It does not allow you to proceed with the questions if you don't WANT a Seawall. It is confusing and designed to only get the answers that the Council and the Taskforce seem to want. It is a typical example of "Response Bias Survey" that Council is so fond of perpetrating on the unsuspecting Ratepayers of the Central Coast. Once you have tick a box to say which one you "prefer" it then gives a totally warped figure that does not reflect the person's real opinion.</p>		
<p>5. Only the property owners (just 61 of them) along the threatened beachfront will benefit from the multi - millions of dollars that would be spent on a Seawall. They knew of the threat and gambled that it wouldn't affect them - yet! With Council in debt to the tune of multi millions of dollars, the services that Ratepayers should expect from Council have dwindled enormously. The roads are pot -holed all over the coast and need millions spent on them. The Sewerage leaks from old systems onto our previously beautiful beaches are a disgrace. The people living around the Tuggerah Lakes are inundated by floodwaters every time we get a big storm - the list is very long and extremely worrying, there are only a few glaring examples. Why are Ratepayers being asked to spend money on something that will only be an enormous drain on our finances for the foreseeable future? A Wall would require ongoing maintenance and sand nourishment at enormous cost.</p>		
<p>6. There is ample evidence of the damage being done by Seawalls. Terrigal Beach and The Haven seawalls have both stripped the sand from the beaches and each time it replenishes, it is only less and less sand that is being replaced. The sand at the Rockpool end has completely disappeared. The example is so glaringly obvious, why is it being ignored?</p>		
<p>7. There are many science based studies of beaches where Seawalls have been built and have removed the sand. The study commissioned by Council in 2004 from the CZMP is now totally out of date considering the new evidence of Global Warming and Sea Level Rise, so where are the new Environmental Impact Statements? Why are studies not being commissioned from totally unbiased sources who have nothing to gain either way from a Wall?</p>		
<p>8. Why is the Administrator trying to get this passed while there are no Councillors (who have a duty to their constituents) and the Community has no say.</p>		
<p>9. Why is the Administrator allowing further development to continue along the threatened Beachfront while these matters are not resolved? Would it not be prudent to put it all on hold?</p>		
<b>Session 5: Wednesday 25 August 12NOON</b>		Registered: 3 Attendees: 1
Why are revetment walls the only options in the survey?		
If a wall/structure is built and significant impacts on the natural beach structure and flow of sand occur. Who will be held to account and in what way?		
Do you have the raw median water level data for the beach front. And if not where can it be accessed?		
<b>Session 6: Wednesday 25 August 4PM</b>		Registered: 5 Attendees: 3
Will there be any access from residents properties to the beach?		



Questions		
How are these projects likely to be funded?		
How long is the build time on each of these projects?		
When is the rough time frame until the Council starts any of these protection measures?		
Residents aren't allowed to put in their own protective measures are they?		
Why is a seawall being pursued when a new plan comes into effect later this year? Why aren't we waiting?		
The proposed sea wall is adjacent to and extends into the Wamberal Lagoon Nature Reserve. What input have LOCAL representatives from NSW National Parks and Wildlife Service had into the process. What are their thoughts/feedback on the proposal?		
As the legitimate independent science concludes, and the proposal for replenishment indicates, we are going to lose our sand if the wall goes ahead. How have Wamberal and Terrigal Surf Clubs been involved in the process? What is their response to the loss of sand and amenity for their members and the ability to patrol the beach for the safety of the public? What will be the impact on mass rescues and public safety when there is no sand to operate emergency vehicles?		
What physical infrastructure will be used on, and offshore to replenish sand? What will this plant look like? What is the carbon footprint created by transporting sand? How will you secure ongoing funding to replenish sand?		
Regardless of the level of government, the fund money comes through, or label assigned to distract the public, ultimately it's all taxpayer money. Why should the residents of the Central Coast have their money used to build a wall that a small minority of people want, instead of paying the debt accrued by the CC Council.		
Please explain how Manly Hydraulics is an independent organisation when they are clearly part of the NSW Government?		
Is the process fundamentally flawed, when the means to attaining an outcome (The Sea Wall) is being debated, as opposed to asking the local community if they want a sea wall in the first place? Will there be a commitment to properly inform and consult ALL Central Coast residents on the proposal?		
<b>Session 7: Friday 27 August 9AM</b>		Registered: 3 Attendees: 0
<i>[SESSION DID NOT PROCEED]</i>		
Is no wall at all an option?		
Has research been conducted into the effects of sea walls on beaches?		
Who will fund any development?		
<b>Session 8: Friday 27 August 4PM</b>		Registered: 6 Attendees: 5
Why haven't the public, particularly local residents and regular users of the beach, been properly informed of the processes/developments? I have been going to Wamberal Beach nearly every day for the past 25 years and I have not spoken to one person who supports a sea wall and most are very angry that they're not aware and have not had a say in these recent developments.		
The sea walls already provided along this stretch of beach continues to remove sand and reduce beach size. This beach is continually fed through sand seasons and tides with the soft dune approach, it's maintained the beach status for the past 200 years. The hard wall is proven to remove sand without replenishment, why would you even incur an ongoing debt for the future generations if you didn't have to? Stop dune development, move the houses to the low side as they continue to slip in the ocean. State is not responsible for homes in fire zones or flood zones - build at own risk and stop the nonsense.		

**“ Creating vibrant communities through  
powerful conversations**

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