

Wamberal Beach Terminal Protection & Sand Nourishment – Investigation and Concept Design: Phase 3 consultation

Engagement Summary

Central
Coast
Council

Between 17 February and 20 March 2022 Central Coast Council sought community feedback on the technical reports supporting the Wamberal Beach Terminal Protection and Sand Nourishment – Investigation and Concept Design project.

This is the third phase of consultation for this project, previous opportunities sought community input on their values and uses for Wamberal Beach (phase one) and comments on the five concept design renders (phase 2).

The phase 3 consultation allowed the community to review the six technical reports and provide comments. The six technical reports are:

- Stage 1 Literature Review
- Stage 2 Coastal Protection Assessment
- Stage 3 Concept Design Options
- Stage 4 Sand Nourishment Investigation
- Stage 5 Coastal Monitoring Webpage
- Stage 6 Cost Benefit Analysis

Engagement Results

Online feedback forms results revealed the following:

- The beach amenity impacts as a result of potential seawall are a significant concern for the community.
- Concerns that the sole beneficiaries of the potential seawall are private property owners, there is also apprehension that the resulting benefits for private property owners will be at the detriment of the broader community with the loss of the public beach.
- There is uneasiness around the initial cost of construction and ongoing maintenance of the seawall and concerns that this will be propped up by public funds.
- The community is concerned that alternate solutions for Wamberal Beach were not included in the technical reports, resulting in doubt being cast on the proposed solutions.

Feedback received indicates an overall opinion that there has been a lack of genuine community consultation with only one solution (Terminal Protection/Seawall) being discussed and considered.

How you connected



1095 visits to the Your Voice Our Coast website



The technical reports were downloaded 535 times



More than 52,000 social media users reached generating 217 likes and shares.



11,521 stakeholders were kept up-to-date through e-news.



113 feedback forms completed

You said...

"It seems clear that the construction of any terminal protection structure will lead to loss of the beach seaward of the wall. This may be partial or complete but regardless it will come at the expense of the wider community losing recreational area. The only reasonable approach is to accept that the houses on the eastern side of Ocean View Drive and Pacific St have been built on a sand dune wedged between the Pacific Ocean and a Lagoon and that continued habitation of this area is not viable in the medium term. The approach towards the problem of coastal erosion on Wamberal beach has been approached from the point of view not if a wall should be built but what kind of wall."

"...Best engineering solution from studies in 2003 may not be world best practice 2022, Why did the literature review not look at world best practice and include all possible solutions. Due to the previously outlined short falls in process and given this is a 50 year lifespan action (building a seawall), please consider restarting the process under the new CMP process."

"...If the State government seems this wall essential, it should itself make arrangements with local residents whose properties will be protected to pay the entire cost if the wall and provide a bond to ensure future sand nourishing is provided should this prove necessary. There is, in my view, no substantive case for Central Coast ratepayers to be burdened with contributing to the significant cost of a wall to protect a few wealthy landowners who have knowingly chosen to build on unstable sand dunes."

"...The option council pursues should reflect the opinions of the community at large rather than just the private beach front stakeholders. With keeping in mind the coastal processes involved and the frequency of storm activity attributed to both La Nina swell and storm events and future climate change sea level rises. The option which best fits should allow for sand flow to reach its natural equilibrium whilst also enabling the natural beauty of Wamberal beach to be maintained."

"I appreciate the comprehensiveness. I would like to express my preferences. If a wall is built, the environmental and community needs are prioritised over private residences. Public money spent on a wall should be for protection of the beach, the environment behind the dunes and surf club, not the private houses on the sand dunes. Extra public money should not be spent on providing private access pathways, ONLY public access pathways, if a wall is built. (These people cannot have it both ways). No public money should be spent on "reclaiming" land lost from private property - they knew the risks when they bought on sand dunes.

"I'm dissatisfied with your take on what the community responded to in the consultation process. I can't see from the mapping overwhelming, if any support for any structure to be built on wamberal beach. You have not provided a choice. It's a wall and that's it. Where's the option to start buying properties back? The chance for nature to replenish the sand dunes that humans have dug out and built into?"

"...if the natural landscape cannot support man-made structures (ie 4-story houses) they shouldn't be there."

"Insufficient community consultation. Lack of consideration for the wider community who rely on the long-term preservation of a natural landscape for their physical & mental health and social life..."

What's next?

A review of the technical studies, results from all phases of community consultation and consideration of Councils role in relation to coastal erosion has highlighted a number of considerations.

These considerations include specific criteria that will need to be addressed in any development application for terminal protection in order to be considered for approval. Central Coast Council has engaged coastal engineers to detail these specific criteria in Wamberal Beach Terminal Protection Structure Engineering Design Requirements.

The draft Engineering Design Requirements will be presented at the June Council meeting.

We will keep the community informed as the project progresses.

Find out more and stay up to date at yourvoiceourcoast.com

June 2022

Why were alternative solutions (such as artificial reefs and retreat) not explored as part of this project?

Various treatment options were explored as part of the development of the Gosford Beaches CZMP including the Worley Parsons Coastal Zone Management Study (CZMS, 2017). This report explores the benefits and disadvantages of artificial reefs and concludes: "Artificial Reefs are not a practical option for the beaches in Gosford – because of their high cost and the difficulty in predicting their effectiveness".

Managed retreat was also explored in the study however, several key considerations such as existing land rights, costs associated with buy back and noting there is no legal requirement for the NSW Government to purchase properties under threat, made it an unviable option at the time.

Council is continuing to explore viable options for Wamberal and other high risk areas through the development of Council's Coastal Management Program.

Why was retreat not considered as part of this project?

Although managed retreat was explored in the in the Worley Parsons Coastal Zone Management Study (CZMS, 2017), Council has no planned retreat policy or mechanism for property reacquisition under planned retreat.

In addition, planned retreat was not a recommended action of the certified Coastal Zone Management Plan for Wamberal Beach, in part because it achieved negative NPVs of -\$272M and -\$215M in previous studies.

For this reason, planned retreat was not included in the scope of the Stage 6 Cost Benefit Analysis, noting "the prohibitively high cost (and impracticability) of planned retreat through property acquisitions would likely fail to ever complete and impose a long-standing disruption by dividing community and imposing significant financial burden on Council, and by extension, the community of the Central Coast"

Any long-term solution must be technically feasible, legally permissible, environmentally and socially acceptable and financially viable.

Why were the community only consulted on options for a terminal protection structure?

The Gosford Beaches Coastal Zone Management Plan (CZMP) outlines a terminal protection structure (seawall) and sand nourishment as the preferred course of action for managing identified coastal hazard threats at Wamberal Beach. The CZMP identifies several key management actions for Wamberal Beach, including:

TW11: Terminal protection- Council to action review, design and funding of terminal protection structure for Wamberal

TW14: Investigation of sources of sand and determination of the feasibility of beach nourishment for Wamberal Beach

TW15: Beach nourishment coupled with a terminal revetment to increase the buffer against storm erosion.

The community were consulted as part of the CZMP and preceding Coastal Zone Management Study (CZMS; 2015). A CZMP Community Engagement Strategy was developed and endorsed by Council in November 2013, this document guided consultation throughout the CZMS – CZMP processes.

In May 2020, Council engaged Manly Hydraulics Laboratory to prepare concept plans for a terminal protection structure (seawall) and sand nourishment solutions for Wamberal Beach. The technical study was progressed to provide options to more sustainably manage the erosion threat over the longer-term.

Should a seawall be constructed, who pays?

A review of the technical and economic studies, results from the community consultation and consideration of Councils role in relation to coastal erosion has highlighted the need for any terminal protection structure to be constructed, owned and maintained by property owners amongst other requirements. It is proposed that private coastal protection works be fully funded by private property owners.

The current course of management for Wamberal Beach which consists of Emergency Management is funded by Council and State Government.

What guarantees are there that a seawall would not negatively impact the beach amenity?

There is no simple answer to this question. There are many different factors that determine if a seawall structure will interact with waves and the beach including:

- Seawall location and alignment
- Type of seawall and its geographical footprint

A review of the technical studies and results from the community consultation highlighted the need for any terminal protection structure to be located as far landward as possible (outside of the active beach profile), to have the narrowest footprint (to reduce erosion/beach encroachment) and have the least sand nourishment requirements (both upfront and during the maintenance phase) all of which are aimed at preserving beach amenity.

Impacts of the proposed coastal structure can be substantiated through 3D physical modelling which has been recommended to be included as part of the Engineering Design Requirements.

Environmental studies/approvals are a legislative requirement for the construction of a terminal protection structure and sand nourishment operations and would be undertaken as part of would be undertaken as part of a detailed design phase.

Who is responsible for sourcing a long-term sand supply for sand nourishment?

The Stage 4 Sand Nourishment Investigation outlines sand nourishment requirements for Wamberal Beach and investigation of potential sand sources including indicative unit cost estimates. Objectives for the study include:

- sand requirements
- sand sources
- sand nourishment cost estimates.

The key objective of Stage 4 is to provide an acceptable level of public beach amenity for the Wamberal/Terrigal embayment over the life of a terminal protection structure. Sand nourishment requirements will be included as part of the Engineering Design Requirements.

If a long-term sand supply solution cannot be obtained, will this hinder resident's ability to pursue construction of a seawall?

Coastal protection works are subject to an approved development application (DA). Under the planning legislation, property owners can submit a DA for coastal protection works at any time. Council being the determining authority will assess the DA based on its merits.

All DA's involving coastal protection works must be developed by a coastal engineer in accordance with local planning and environmental legislation including the Coastal Management Act and Coastal Management State Environmental Planning Policy.

In addition, the Engineering Design Requirements (under development) will provide key criteria for property owners preparing DA's. This includes location of the seawall on private property, removal of current ad-hoc works and sand nourishment requirements. These criteria's aim to increase beach width (by locating the structure further landward and removing existing structures) reducing sand nourishment requirements.

Furthermore, the Wamberal Taskforce recently established a revised Terms of Reference which will focus on sand nourishment opportunities for Wamberal. The Taskforce is chaired by coastal specialist Phil Watson and includes Member for Terrigal Adam Crouch MP, representatives from the Department of Planning and Environment, and Council's staff

Has Central Coast Council explored learnings from existing examples around Australia, particularly Collaroy?

Certainly. Project staff along with Council's Administrator Rik Hart have attended multiple site visits to Northern Beaches Council to gain insight of the many complexities associated with coastal protection works.

As part of the MHL technical studies approximately 91 seawall structures on sandy beaches predominately in south-east Queensland and NSW were catalogued regarding their impacts on beach amenity. Of these 91 seawall structures, up to 7 have known adverse publicity regarding their impacts on beach amenity. The common feature of these seawalls is an alignment located more seaward than that proposed for Wamberal, sometimes on a beach that is receding at a rate more than five times the rate of Wamberal (for example Stockton Beach).