



Maroochy River Groyne Field Replacement

The Maroochy River entrance position naturally migrates in response to the prevailing coastal and estuarine processes with the entrance being located both north and south of Pincushion Island since the 1940s.

Southern migration of the entrance in the 1990s saw erosive pressure placed against the Cotton Tree Holiday Park. From 2001 Council constructed a number of groynes and section of seawalls to protect park assets utilising stacked geotextile sand containers. A number of these coastal structures have now reached the end of their useful life.

In line with Council's endorsed Shoreline Erosion Management Plan (SEMP) 2014, investigation into future coastal infrastructure upgrades is now taking place.

In January 2017, a report was presented to Council at the Ordinary Meeting that sought direction for the future coastal infrastructure upgrades as part of the broader Maroochy River mouth management.

The report included an assessment by consultants WBM of a range of options in relation to the renewal of the river mouth groyne field, as follows:

- Option 1 – Replace existing groynes (geobag to rock)
- Option 2 – New 200m rock groyne at Cotton Tree
- Option 3 – Northern channel with constructed beach
- Option 4 – Northern channel with breakwater

From this meeting Council resolved to:

- undertake a further analysis of the economic, tourism, social and environmental aspects of the available options -including the retention of geofabric bags at the Maroochy River entrance groyne, and
- undertake wide community engagement on the available options to inform any future recommendations for Council's consideration.

Cost Benefit Analysis

Through a competitive process, Council engaged JB Pacific to undertake a cost benefit analysis (CBA) as the first stage of a process. The use of an economic appraisal has allowed several options to be compared through their cost to construct and maintain, and the benefits received by the local community, such as: the protection of high-value coastal land with historic and cultural significance, environmental constraints, associated assets, recreational areas, and visitor infrastructure.

It also included consideration of the protection of assets and infrastructure at risk of future erosion, the role of the caravan park on tourism and visitor spending within the local government area (LGA), and the potential to reduce the need for ongoing beach nourishment south along Maroochydoore Beach.

Based on the consideration of all of these social, economic and environmental variables all options returned a positive cost-benefit ratio, and are therefore considered economically viable. However the analysis concluded that the most financially beneficial material for a new groyne field was rock,

rather than geobags. While the CBA highlighted that rock is more expensive initially, it has low ongoing maintenance costs and no replacement costs. In contrast, the geobags have lower construction costs, however significantly higher maintenance requirements and will require three replacements to span the same 50-year period.

While overall the CBA identified that the most beneficial option was the single large rock groyne (as compared to a groyne field) it was assessed only as a conceptual design. In order to remain the most cost-beneficial, a position and orientation would need to be selected that offered full protection to Cotton Tree, minimised annual nourishment costs, did not cause any other damages such as downdrift erosion, and did not significantly change the structure dimensions, and therefore costs.

The CBA also indicated that two options to re-establish the Maroochy River mouth to the north of Pincushion Island have the lowest economic justification, due to their high construction costs and associated risks.

Community Engagement

To ensure council can receive informed feedback across all sections and regions of the Sunshine Coast, community engagement will occur in two parts. The first part will be via an established Maroochy River Estuary Consultation Group (MRECG) with an independent chairperson and also a broader community consultation program.

As part of the wider community engagement process, a number of information sessions are proposed to be held across the Sunshine Coast at the following venues:

- Coolum Surf Club, Coolum Beach
- Caloundra Power Boat Club, Golden Beach
- Maroochy Surf Club, Maroochydore
- Maleny RSL Sub Branch, Maleny, and
- Nambour RSL, Nambour.

A project web page has also been set up at <https://www.sunshinecoast.qld.gov.au/Living-and-Community/Community-Engagement/2017/Maroochy-Groyne-Field-Community-Consultation> and will be kept up to date as the project develops.

Where to from Here?

The community information sessions and feedback from the MRECG will provide the community with an opportunity to understand the details of each option available to council, including a breakdown of the social, economic and environmental factors.

Feedback is requested via an online survey available on the community webpage identified in this fact sheet. Public computers with internet access and Wi-Fi for use with mobile devices are available at all council libraries for those community members without direct access to the online site.

All feedback received from the MRECG and the wider community will be used to assist council to make an informed decision on the selection of a suitable option for upgrades of the Maroochy River mouth coastal structures when a report is provided on the outcome of this work in December 2017.

Contacts

For more information, please email the Project Officer for this consultation process at: deborah.mcquattie3@sunshinecoast.qld.gov.au.



Sunshine Coast Council

www.sunshinecoast.qld.gov.au

mail@sunshinecoast.qld.gov.au

T 07 5475 7272 F 07 5475 7277

Locked Bag 72 Sunshine Coast Mail Centre Qld 4560