

Project News

Project number: H0493

April 2020

Maroochy Groyne Field Renewal

Protecting Cotton Tree from erosion

About the project

Renewal of the Maroochy Groyne will ensure ongoing protection of the Cotton Tree precinct from erosion.

In general, groynes can consist of differing materials that are positioned perpendicular to the length of a river to reduce waves and currents.

The existing groyne will be renewed with geotextile containers (also known as geobags or geofabric bags) filled with sand.

This renewal project is the result of extensive council planning, including a 10-year Shoreline Erosion Management Plan (SEMP) developed in 2014. This plan and the groyne renewal project incorporate sound science, coastal engineering principles, community values and coastal dynamics.

Protecting Cotton Tree

The entrance to the Maroochy River naturally migrates due to coastal and estuarine processes. Southern migration in the 1990s saw erosive pressure occur at the Cotton Tree Holiday Park.

In 2003 council constructed the groyne and sections of seawall to help protect the Cotton Tree Holiday Park and other nearby valuable assets. Some of the existing groyne structure has now deteriorated and needs to be replaced.



Figure 1 Maroochy River Groyne

Geotextile material and design

The design and materials of this project were determined following analysis of economic, tourism, social and environmental impacts, extensive community consultation, as well as research into the best and latest technology options. This research has involved comprehensive consultation with geotextile container manufacturers and engineers from the Water Research Laboratory at the University of New South Wales.

Council's coastal team has worked with these industry specialists to undertake physical modelling of the different design structures and test them on-site at Maroochydoore.

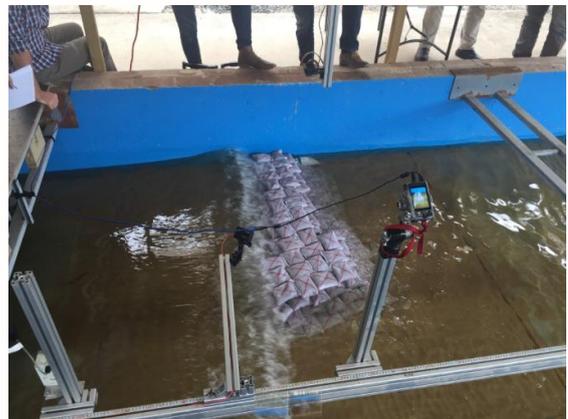


Figure 2 Coastal engineers test geotextile designs at the UNSW Water Research Laboratory

An experienced contractor has now been engaged to install numerous geotextile bags filled with sand to stabilise the groyne.

Community consultation

Council undertook extensive community consultation when considering options for the groyne renewal in 2017. This included establishing the Maroochy River Estuary Consultation Group (which has continued to work with council on design options and

testing) and seeking wider community feedback.

Council considered this feedback in determining that the existing groyne would be replaced with geotextile bags instead of rock. This consultation was recognised nationally with a 2019 Australian Coastal Award for Community Engagement.

Construction timeframe and hours

Stage 1: Monday 20 April – early September 2020; 6am – 6pm Monday to Friday only (subject to weather and tidal conditions).

Stage 1 construction will focus on renewing the two northern-most groyne structures (Groyne #3 and Groyne #4) and the seawall surrounding the Cotton Tree Holiday Park.

While the construction team will be on-site from 6am, machinery will not operate until 7am.

Heavy machinery including trucks and excavators will be in operation and intermittent noise impacts are to be expected.

The construction team will try to minimise construction impacts wherever safe and possible to do so.

Council will continue to liaise directly with the Cotton Tree Holiday Park management.

Stage 2 will take place in 2021.

This stage will focus on the two southern-most groyne structures (Groyne #1 and Groyne #2) as well as a ramp to facilitate emergency access to the north of the site. Council will keep the community updated on Stage 2 schedules closer to the expected start dates.

Please see the map on page 4 to view the groyne construction area.

Novel coronavirus (COVID-19)

Delays may also result from the COVID-19 pandemic. Community information regarding council and COVID-19 can be found on

council's website.

www.sunshinecoast.qld.gov.au/coronavirus.

Community access to Cotton Tree Holiday Park, beach, river and car park

Cotton Tree Holiday Park

Following a directive by the Federal Government amid the COVID-19 pandemic, the Holiday Park is currently closed until May 31 (correct at the time of publication) to non-essential travellers. Access to the Cotton Tree Holiday Park will be maintained during construction.

Beach and river

Community access will be maintained to the beach and river in dedicated 'safe zones' throughout construction.

For community safety and to help works proceed as quickly as possible, some beach access and beach areas will be fenced off and temporarily closed during construction. Some swimming exclusion zones will apply.

Alternative pedestrian access points will be provided to the beach and Holiday Park.

The beach shower at Beach Access #142 will be temporarily closed during construction.

Signage will help to communicate all temporary changes. Pedestrian and vehicle traffic control will be in place as required.

Closed circuit TV (CCTV) will be installed and footage taken of the works site

Emergency vehicles and Surf Life Saving camera

Emergency vehicle access will remain at all times.

The Surf Life Saving camera will continue to operate.

Car park

A portion of the beach car park along Alexandra Parade will be temporarily used by the construction contractor for a site office and materials storage area.

Some car parks will be temporarily used by construction vehicles from Monday to Friday, then reopened for community use on weekends and public holidays.

Please see the map on page 4 for community access and car parking areas (correct at the time of publication).

Environmental controls

As a condition of the construction tender, council has strict environmental conditions in place. All relevant environmental permits have been completed to undertake these works.

Sand used to fill the new geotextile bags will be sourced directly adjacent to the works site. The sand from the old geotextile bags will be reclaimed and used to replenish the beach.

At times, water surrounding the groyne may seem discoloured during construction, due to the removal and replacement of the geotextile bags, machinery in operation and sand disturbance. There is no cause for alarm and water quality monitoring will be in place.

Further information

You can find further information about the Maroochy Groyne Field Renewal project on council's website at <http://bit.ly/maroochyrivergroyne>

For more information you can also contact council's project team on maroochygroyne@sunshinecoast.qld.gov.au

or customer service via the details below (please quote Maroochy Groyne Field Renewal)

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Figure 3 Community access areas and temporary closure of beach access and partial carpark areas

