

Mooloolaba beach nourishment April 2025

Project summary

The Queensland Government (Marine Safety Queensland) need to urgently dredge the Mooloolah River to remove sand from the entrance channel and nearby area to restore safe boating access.

Council will use this sand to restore areas of Mooloolaba beach affected by erosion due to recent severe weather. It will also help protect it from future storms.

We understand that the upcoming school holidays are a special time for families to relax and enjoy together. However, MSQ have advised us that due to the urgent nature of the dredging works, these activities will need to take place over the holiday period.

Work will be paused over the Easter long weekend.

We assure you that every effort will be made to minimise any inconvenience caused.

Start date

Work is expected to begin from 14 April 2025 and take approximately two weeks, weather permitting.

Work will be paused over the Easter long weekend.

How will it work?

MSQ will use a dredge to suck the sand from the mouth of the Mooloolah River and the shoal in Mooloolaba Bay.

The dredge will connect to Council's pipeline that is already buried beneath the sand along Mooloolaba Beach.

Using a booster pump, the sand will be transported through the pipeline to where it's needed further up the beach.

The sand will be placed on the beach from beach access 179 in front of the caravan park, through to the beach access 183 at the Mooloolaba Surf Life Saving Club tower.

See figure 1 for the area we will be working in.

Access changes

There will be some temporary changes to beach accesses. Signage will be in place to advise of any changes. Please follow instructions for your own safety.

There will be no disruption to property access.

Working with the pipeline on the beach

The outlet pipe deposits sand on the beach.

Operators on the beach use an excavator to create a sand bund and channel on the beach, which helps direct water the sea, while depositing sand and minimising erosion.

The sand bund requires continuous maintenance with the use of an excavator and this area should be avoided at all times.

Due to the velocity of water from the outlet pipe, the sand banks and sand bunds can become unstable at any time.

Pedestrian signage and detours are set up to assist pedestrians in avoiding danger, where required.



Example of outlet pipe and channel

Booster pump

A booster pump is needed to push sand up the entire length of the beach.

It will sit on the beach at beach access 195. See figure 2 for booster pump location.

The booster pump will operate whenever the dredge is working, which is expected to be during the week and daylight hours only. You can expect some fumes and noise.

This pump is dropped off on a large truck and will be put into place by an excavator. Please stay clear of the area while this happens.

Beach safety tips

Please follow the directions of the staff on site to move safely on Mooloolaba Beach, specifically where the sand exits the pipeline.

- The dredge sand is transported through a pipeline and deposited at the nominated beach location. The velocity of the material coming out of the pipe is extremely fast and walking through the water can cause you to lose your footing.
- The outlet dredge sand and water mixture is super saturated and can behave like quicksand.
- The sand deposited on the beach is stockpiled with an excavator and uncompacted. It can become unstable and collapse at any time.
- Always walk around the work area via the designated pedestrian walkways.
- Do not enter the flagged area where machinery is working.
- Choose patrolled bathing reserves when choosing to swim.
- Throughout dredging operations, pipes are dragged along the beach with the use of excavators. Avoid machinery and pipes while this operation is being undertaken.



Example of pedestrian detour signage on beach.



Example of dredge vessel with floating pipeline

Water safety tips

Please follow safety directions at the dredging site at Mooloolaba harbour entrance:

- Swimming near a dredge is like swimming through a construction site. Swimming or using any non-powered watercraft is not advised in this area.
- The dredge has both floating and submerged parts. Floating buoys are used to show anchors but you can't always see the danger below the surface!
- Sharp barnacles grow on the outside of the floating pipe and the dredge vessel and can cause cuts which may lead to infection. Do not interact with any vessel or floating pipework.
- Dredge operators are working, and are focusing on their job. They can't always be keeping an eye on you.
- Respect the exclusion zones and do not enter the delineated area in the water.

- The floating pipe moves around with tides and swell. Make sure you stay well clear of these pipes during any water activity.
- The dredge cutting head has sharp teeth and strong vacuum force. The force of the vacuum may cause sandy banks to become unstable.

Multiple work fronts:

Dredging operations require multiple work fronts.

The dredge vessel, which is located in Mooloolaba harbour entrance, is sucking sand to be transported to the beach via a pipeline.

Access to some parts of the following areas will be restricted to ensure community safety:

- the booster pump area at beach access 195
- the nourishment sites at Mooloolaba beach.

Frequently asked questions:

Why do we need to replenish sand on our beaches?

Sunshine Coast beaches are vulnerable to erosion during storms, swells and weather events.

Our preferred option is to let mother nature replenish the sand on the beach naturally.

However, sometimes we need to step in and pump sand to certain locations that aren't naturally repairing quickly enough. This is for the safety of our community and to protect our foreshore areas and important community assets such as beach stairs, roads, parks and playgrounds.



Severe weather erosion at Mooloolaba Beach caused some beach accesses to be closed.



Scarping after storm event at Mooloolaba Beach

Q: How much sand is being moved?

A: Up to 10,000 cubic metres.

Q: Can I still use the beach?

A: Yes, but restrictions will be in place around the placement site and this site will change day-to-day.

Q: Why is council involved in the harbour dredging project? Could MSQ dispose of the sand without council?

A: MSQ can dispose of the sand themselves, however Council has requested that the sand be placed on the eroded beach and help protect it during the upcoming storm season.

Q. Why are you placing sand in this location?

A: The section of Mooloolaba Beach from the Caravan Park to the Mooloolaba SLSC has experienced recent erosion due to TC Alfred and follow up high tides and swell events.

Q. Why can you put sand on Mooloolaba Beach and not Golden Beach or Bribie Island?

A: Council regularly uses sand from the Pumicestone Passage to nourish sand along Golden Beach.

However, the Department of Environment and Science is responsible for the management of Bribie Island and the Pumicestone Passage, including any proposed dredging or nourishment programs.

Q. Where is the sand delivery pipeline located?

A. The pipeline is buried under the sand and extends from the Mooloolaba harbour training walls along the beach to the Mooloolaba SLSC.

Q. Will any of the previous community revegetation works be either disturbed or destroyed?

Given the pipeline is already in place it is unlikely that the dunes will be disturbed. Any disturbance will be revegetated at the end of the campaign.

Q. When will operations take place and will it cause significant noise disturbance?

A. There will be some noise associated with the dredging and sand relocation works but it would not exceed typical low-level construction noise and be limited to between 7am and 6pm, generally Monday to Saturday (weather and site conditions dependent).

Q. Will beach access be restricted?

A. Access to Mooloolaba Beach will be restricted within a small area (approximately 50 metres x 20 metres) where earth moving machinery is used to profile the nourishment material throughout the project. This location will vary depending on the stage of the works.

Q. Will sand change the surf conditions at Mooloolaba Beach?

A. It's unlikely, as the placement of the sand is not in the surf zone.

Q. What about any events scheduled on Mooloolaba Beach?

A. We will work with event organisers to minimise impact for any upcoming events.

Further information

Further information

For Mooloolaba Harbour dredging – visit MSQ website at <https://www.msq.qld.gov.au/Boating-facilities/Mooloolaba-boat-harbour-dredging>

For Mooloolaba Beach management – contact Council's project team please email coastalandcanals@sunshinecoast.qld.gov.au

Figure 1: Sand placement location at Mooloolaba Beach

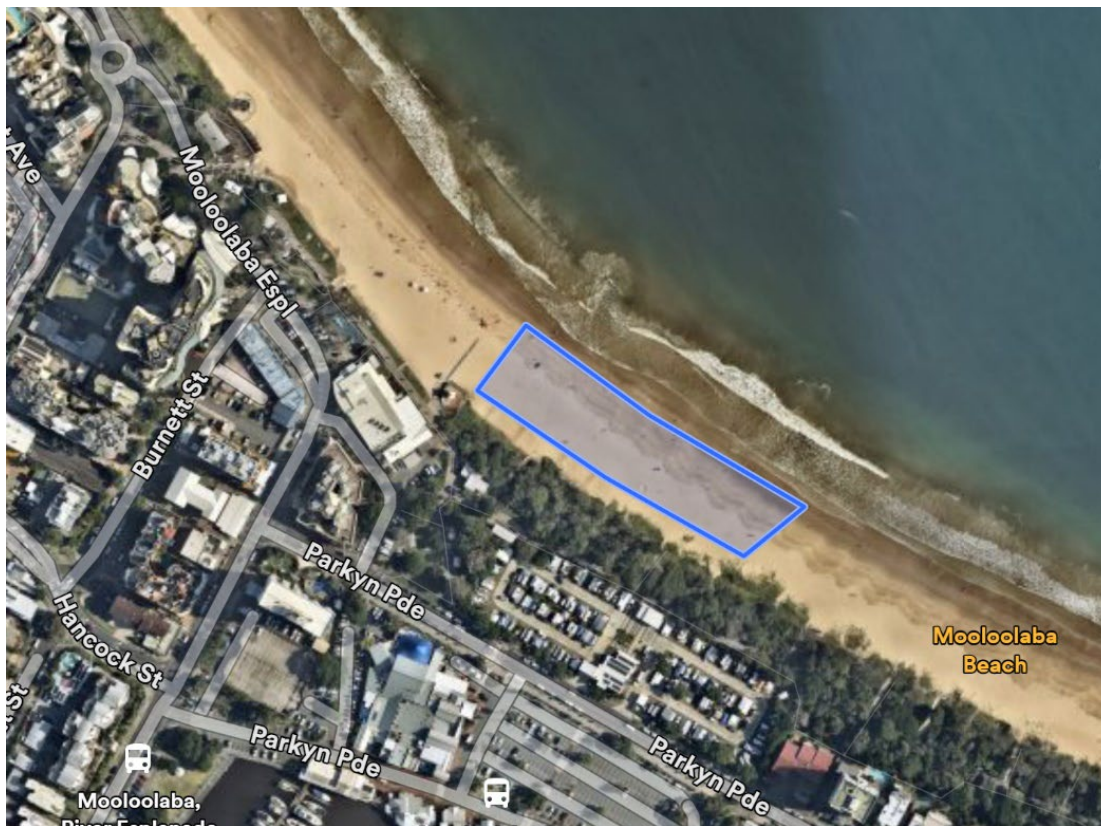
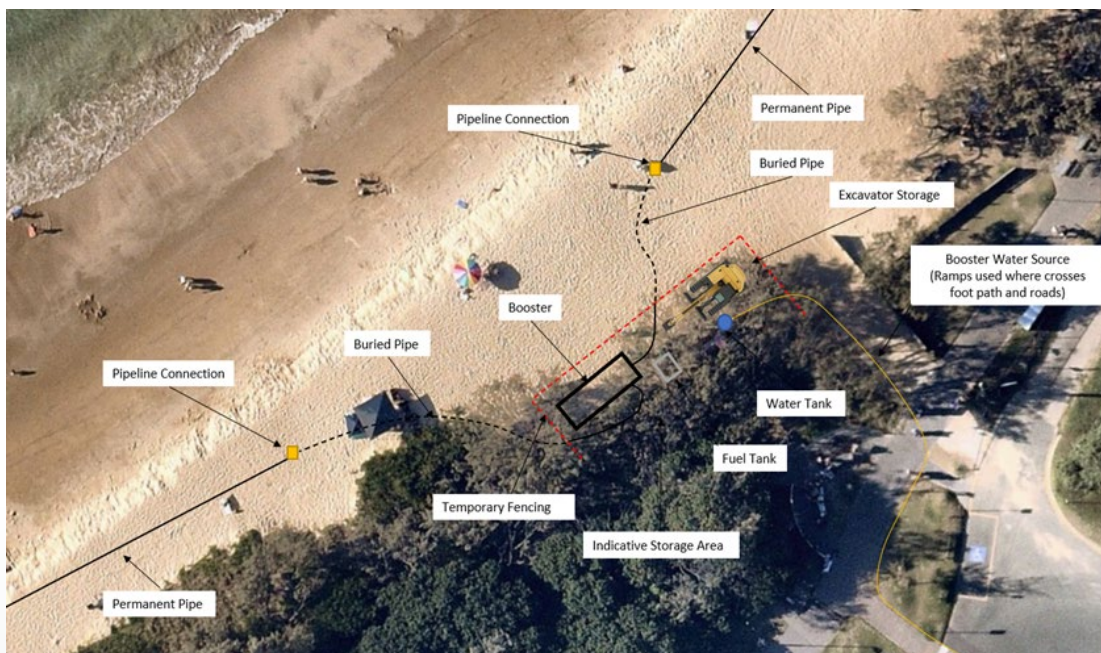


Figure 2: Booster location



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