

Maintaining the Coastline

The Moreton Bay Region has a coastline of approximately 170 kilometres, which includes open shoreline, such as sandy beaches and sedimentary estuarine bays. Other parts of the coastline are either modified with protective structures (such as seawalls and groynes) or naturally vegetated with marine plants, such as mangroves.

The region's feature beaches include Redcliffe Peninsula beaches at Clontarf, Bells, Margate, Suttons, Queens Beach (South, Central and North) and Scarborough, Deception Bay beaches at Beachmere, Sandstone Point and KalMaKuta, and Bribie Island beaches at Banksia Beach, Bellara, Bongaree and Woorim.

Feature open embayments include Woody Point, Deception Bay, Godwin, Toorbul and Donnybrook.

Moreton Bay Regional Council has an active program of beach and bay maintenance for public health, hygiene, safety and visual amenity that is managed specifically for each beach and bay area, depending on the local conditions.

Council adopts different management approaches for beaches and bays. This is due to guidelines, policy and legal constraints of the Queensland State Government.

This is particularly important in relation to the disturbance of marine plants.

Marine Plants

Marine plants are broadly defined and protected by the Fisheries Act 1994. They include plants or plant material of tidal origin or other plants on tidal land (up to highest astronomical tide). Marine plants include mangroves, seagrasses, samphires, salt couch, saltmarsh plants, algae and other tidal plants growing on or adjacent to tidal land both landward and seaward. Plants are considered to be marine plants whether they are living or dead, standing or fallen; and include any terrestrial plants or plant material that are on tidal lands. Material of a tidal plant includes all parts of mangroves and seagrasses or other plant flotsam (such as branches, bark, leaves, stems, roots, flowers or seeds).

Marine plants provide important habitat and food for fish and other marine life, including the provision of shelter, food and nursery areas for juvenile species.

They also play an important ecological role in shoreline protection (by dissipating wave energy), nutrient cycling, supporting habitat complexity and the carbon cycle (including carbon sequestration).

Removal of marine plants (dead or alive) from beaches and bays requires authorisation from the State Government. Some routine maintenance activities may be undertaken in accordance with 'accepted development requirements' while more high impact works require a development approval and contribution of an environment offset, such as payment of a fee to the State.

Beach and Bay Cleaning

In general, Council prefers to let build-up of seagrass and other marine plant debris naturally break down and wash away with the tides. However, Council is allowed by the State to remove from beaches and foreshores any unattached (i.e. not rooted into the ground), decomposing marine plant material that has become a public health issue, and algae or cyanobacteria that is toxic or has become a public health issue.

For beach cleaning on sandy shorelines, Council undertakes:

- ✓ Grooming, to remove litter and hazardous materials, and to improve public safety, hygiene and amenity
- ✓ Removal of unattached marine plants, such as seagrass and fallen trees.

For embayment cleaning, Council:

- ✓ May remove Lyngbya majuscula - a common species of cyanobacteria (blue-green algae) - that creates an unpleasant odour and can cause potential public health concerns, such as skin and eye irritation
- ✓ Maintains stormwater drains than become blocked with sand, debris and litter
- ✓ Gathers and removes large amounts of rubbish and dead animals.

Council does not undertake beach cleaning on soft sedimentary silts and muds in our estuarine embayments, such as Deception Bay, because it can be difficult and unsafe.

Beach Sand Maintenance

In addition to Council's routine program of beach cleaning, it also has a program of beach sand maintenance. Council regularly monitors the condition of the regional beaches and actively moves sand from naturally accumulated areas - including stormwater outlets, jetties, boat ramps, seawalls and groynes - to erosion zones, with authority from the State Government.

Also, before, during or immediately following severe storm events, Council may have to undertake urgent beach works to avoid or repair highly damaging erosion and protect coastal assets.

These beach works take three forms:

- ✓ Reprofiling or scraping - where sand is pushed from near the low water mark up to the front dune escarpment
- ✓ Backpassing or bypassing - where sand is shifted from an accretion (or accumulation) zone, such as beside a groyne, jetty or rocky point, along the beach to an erosion zone
- ✓ Nourishment - where new sand is imported from a different location (or sometimes commercially sourced) to replenish lost sand.

Council's beach sand management activities are guided by its over-arching Shoreline Erosion Management Plans (SEMPs), endorsed by the State Government, and are conducted in accordance with the guidelines, policies, approvals and legal requirements of the State Government.



Beach Grooming, **Scarborough**



Seagrasses and Mangroves, **Deception Bay**

Further information

For more information about the protection and management of marine plants, including mangroves, please refer to Fisheries Queensland:

www.daf.qld.gov.au/business-priorities/fisheries/habitats/marine-plants-including-mangroves

If you have further enquiries or wish to lodge a customer request, please contact Council online at:

www.moretonbay.qld.gov.au/Contact



Beach Sand Maintenance, **Bongaree**