

Importance of coastal vegetation



A healthy dune



Residents caught clearing vegetation on council land may be fined.

The Mackay region's coastal zone is characterised by a diverse range of natural features including sandy beaches, rocky headlands, extensive intertidal flats, and substantial areas of coastal wetlands. These areas are under increasing pressure from development, climate change, population growth and recreational use.

Importance of coastal vegetation

The native vegetation in coastal areas plays an important role in stabilising the surface against wind erosion and provides habitat for wildlife. Coastal dunes provide a buffer against coastal hazards such as wind erosion, wave overtopping and tidal inundation during storm events. They also provide a source of sand to replenish the beach during periods of erosion. For

this reason, the protection of coastal vegetation is important for the long-term protection of beach front properties. Council hopes that residents will take an active approach in understanding the necessity for coastal areas to remain in a natural state and help us to protect not only the natural environment but in the longer term people's homes and properties.

Short-term erosion

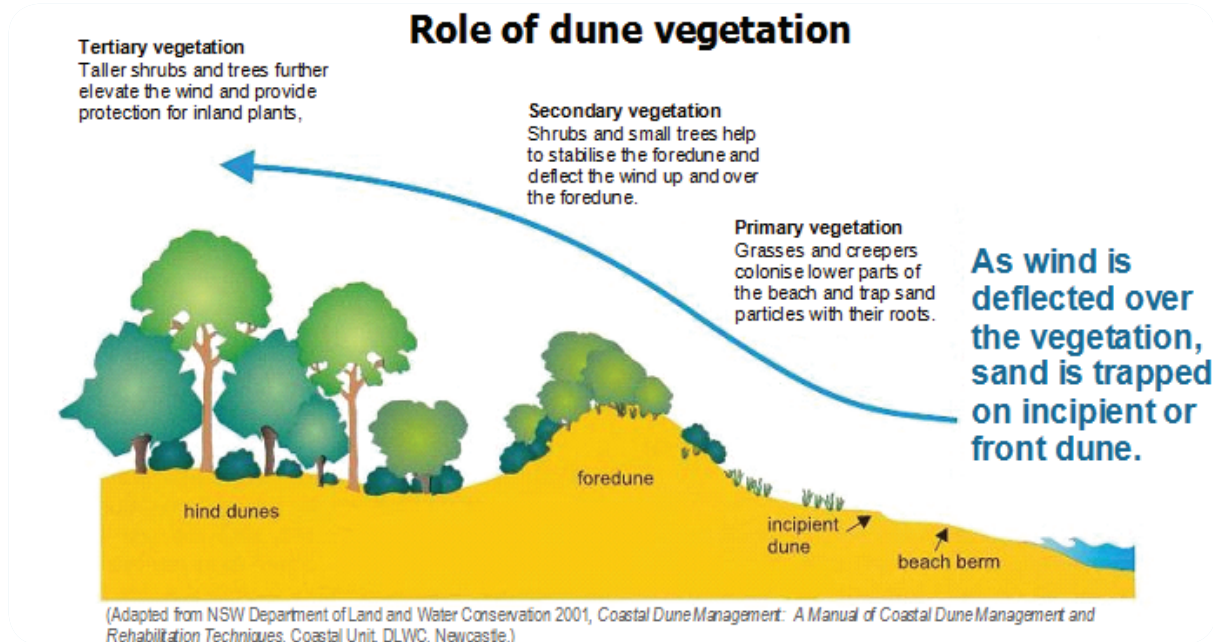
Short-term erosion is the product of natural beach fluctuations. It occurs over a period of days as a result of extreme weather events such as a severe storm or cyclone activity. During a storm, strong wave action erodes sand from a beach, creating an erosion escarpment destroying the incipient dune and moving the sand seawards. After the storm passes, normal wave processes transport the sand back onshore,

restoring the incipient dune and the equilibrium state of the beach. By having a well-developed, vegetated dune system, the system has sufficient sand to restore the beach to its original state after a storm.

Long-term erosion

Long-term erosion is continuous and often caused by a reduction in the amount of sand being transported on the beach. During a severe erosion event, the frontal and incipient dunes are removed leaving a large erosion escarpment as sand is transported seaward to form an offshore sand bar. If too much of that sand is lost seaward and there is not enough new sand coming into the system, the beach will not be restored to its original state and the coastline will retreat landward, and eventually coastal property may be threatened.

Protect our coastal vegetation



Vandalism

Vegetation can be destroyed by natural causes such as storms, cyclones, droughts or fire, or by human interference such as clearing, grazing, vehicles or excessive foot traffic. If the vegetation cover is damaged strong winds may cause 'blowouts' or gaps in the dune ridge. Unless repaired, these increase in size; the whole dune system sometimes migrates inland covering everything in its path. Meanwhile, with a diminished reservoir of sand, erosion of the beach may lead to coastal recession. To avoid this, protecting the vegetation is vital. The beach between high and low tides is resilient but the sensitive dunes that we cross to reach it must be protected also. For this reason it is important to stick to the official beach access tracks rather than cross the dunes at

any point. If people are caught planting, clearing or damaging vegetation in coastal areas, they could face a penalty. Council has the authority to install cameras and/or signage if necessary. If you believe a council tree is either dangerous and/or sick contact council and a trained arborist will inspect it. At no point should you attempt to remove it yourself.

Types of Vandalism

- Cutting off trees at the base of the trunk
- Cutting or breaking branches off
- Breaking the tops of younger trees off
- Pulling out newly planted trees
- Poison spraying of newly planted trees
- Drilling and poisoning of older trees
- Clearing of trees and vegetation with machinery

- Mowing over smaller trees

Impacts

- Negative impacts to the natural environment and costs to ratepayers
- Reduced resilience of coastal environments exposing residents to greater impacts of storm damage and erosion
- Loss of habitat and biodiversity
- Increase of light pollution adversely impacting turtle nesting
- Loss of amenity
- Cost of replacing trees, labour, materials, surveillance etc.

For more information or to report vegetation vandalism call 1300 MACKAY (622 529)