



COASTAL VEGETATION AND SAND DUNES

Information sheet

Version 1

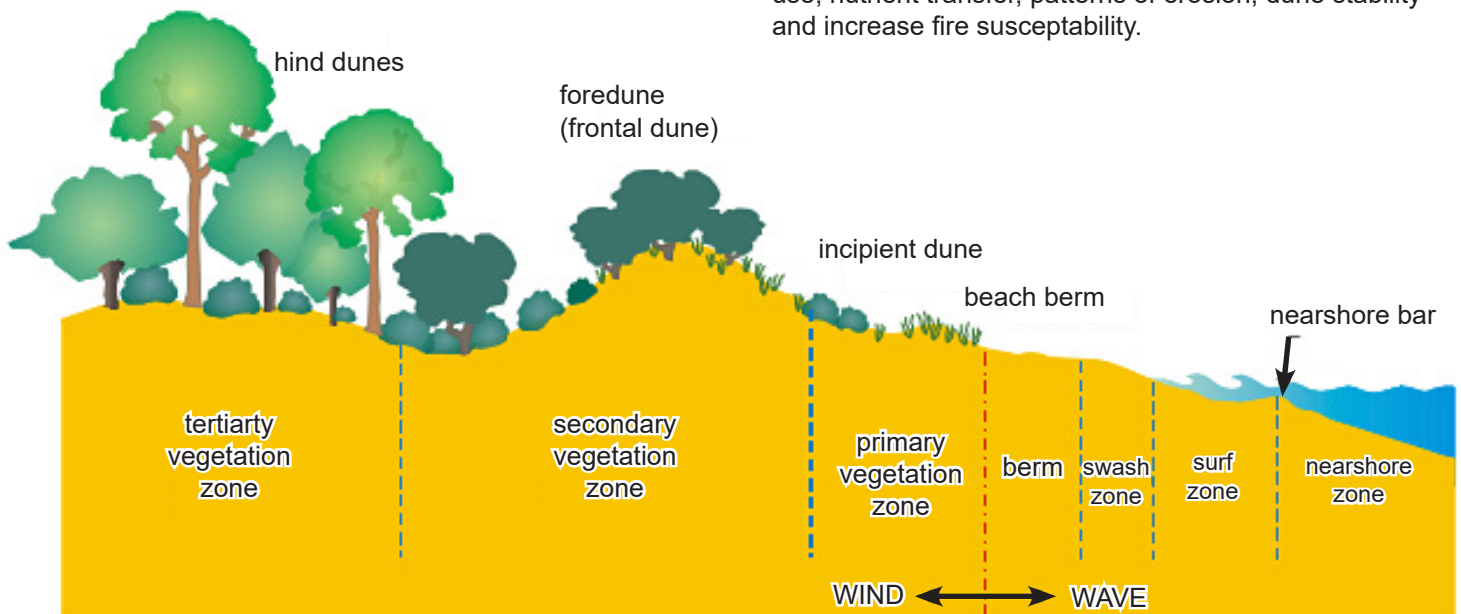
The Importance of Coastal Dune Vegetation

Queensland's Capricorn Coast foreshores are some of Australia's most valued natural assets and part of the Great Barrier Reef World Heritage Area. However, many of Livingstone Shires foreshores and beaches are under increasing pressure from multiple impacts such as public recreation, residential development, weed invasion and climate change. It is important that we protect the natural dune systems which provide a buffer zone to coastal erosion and habitat for many native plants and animals.



Vegetation in coastal areas plays an important role in stabilising the surface against erosion. 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 and visitors will respect 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.

Coastal plants have adapted to live in a harsh environment of salt spray, sandblasts, strong winds, high temperatures and flooding. Coastal development has placed significant pressures on once-pristine sandy beaches. Among other stressors, property owners often remove native vegetation and natural debris and replace, or remove, native species with non-native ornamental species. Invasive weed and non-native species can disrupt vegetative communities, pollination cycles, water use, nutrient transfer, patterns of erosion, dune stability and increase fire susceptibility.



Typical Dune Cross-section

It is essential to keep sand dunes intact and well covered with vegetation to maintain beach stability and minimise coastal erosion. All dune plants, whether they are grasses, shrubs or trees have a role to play in dune stabilisation. Grasses and vines or obstructions such as fallen timber, trap windblown sand and help to build the dunes. The aerial parts of trees, such as the Coastal She-oak obstruct wind-blown sand and absorb wind energy. The dunes become higher and wider as the sand continues to build up, triggering vegetation to grow faster.

When native vegetation and natural debris is removed the surface is exposed to wind and water erosion. The replacement of native species with non-native ornamental species or weeds also disrupts the coastal ecosystem.



You can help protect Livingstone's magnificent coastline by

- ▶ Using the official beach accesses provided by Council
- ▶ Using the beach and not the dunes as it is a habitat for fragile flora and fauna
- ▶ Disposing of litter and garden waste correctly
- ▶ Not dumping green waste in the dunes as it may spread weeds
- ▶ Not planting exotic garden plants or establish turf lawns within the fore-dunes
- ▶ Joining up with one of the Livingstone Shires many environmental volunteer groups and become a steward for the Capricorn Coast.




All plants (living or non-living) that grow on, or, adjacent to tidal lands are protected and regulated by Council and the Queensland Government and in some instances the Australian Government. Clearing or interfering with sand dune vegetation on Council managed land, requires a permit.

Important things to know about caring for Livingstone Shire's fragile coastline

Livingstone Shire Council Local Laws and other Government Legislation (fines may apply) restrict or prohibit these following activities:

- ▶ Poison, cut or prune trees or other vegetation growing on council reserves or within the fore-dunes or beach
- ▶ Light fires on the beach and dunal areas
- ▶ Collect deadwood from the beach and fore-dune area
- ▶ Illegally dump green waste or other refuse
- ▶ Drive vehicles on dunes or non-designated areas
- ▶ Encroach into council or government controlled reserves and coastal dune areas

If you witness or suspect unauthorised activities (as listed), please contact us

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