

# SHEET 6 TO 11 – ADAPTATION ACTIONS – COASTAL MANAGEMENT AND ENGINEERING

## SHEET 6 - DUNE PROTECTION AND MAINTENANCE

The dune system is the primary natural defence from coastal hazards. The foredunes dissipate wave energy and protect the land behind from impacts of erosion and storm tide inundation.



Dune protection and maintenance is important to encourage sand to accumulate across the dunes, and be stabilised by vegetation. In most cases a well vegetated, stable dune system can be achieved through actively reducing disturbance and facilitating native vegetation establishment.

Native vegetation has an important role in dune development and stabilisation. Native vegetation actively captures wind blown sand, which accelerates the build up of dune volume and height, which in turn provides increased protection from coastal hazards to the land behind.

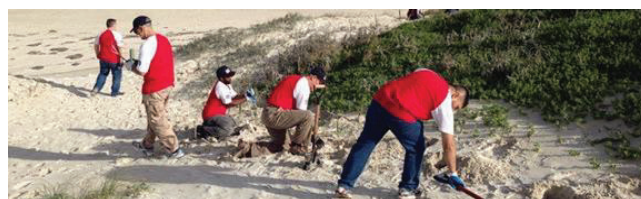
The Gympie Region coastline has extensive coastal dunes systems that provide protection from erosion and inundation to many assets. Active protection and enhancement of these dune systems is an ongoing priority action across the region.

### Reduce disturbance

Reducing disturbance to the dune system can be achieved and balanced with access needs through fencing, signage, and providing defined / formalised access points and walkways / boardwalks at the most appropriate locations. Minimising through-traffic across the dune system is important to allow native vegetation to establish and contribute to building the dune system.

### Weed removal and native vegetation regeneration

Native vegetation is best adapted to the role of enhancing dune development and stability in different localities. Exotic / weed species can inhibit native vegetation establishment, and therefore controlled weed removal is an important part of dune protection and maintenance. In most locations, controlled weed removal, combined with reduced disturbance, will be sufficient to allow native vegetation to regenerate from existing seed banks.



### Revegetation (if required)

In some cases, if the native vegetation seed bank has been diminished due to clearing or other disturbance, revegetation with local species may be required as part of dune protection and maintenance. Vegetation plans can be tailored to consider suitable species, access, views and other site-specific needs. Matting (geo-fabric) can be used to stabilise dunes while new vegetation establishes.

Sand fencing can also be employed as part of dune protection and maintenance to encourage sand accumulation, protect revegetated areas, and reduce disturbance to dunes.



### Relevant and priority areas

Dune protection and maintenance is a priority action for the sandy open coast localities.

Dune protection and maintenance			
	Reduce disturbance (fencing)	Weed removal and encourage native regeneration	Native revegetation if required
Cooloola (Estuarine frontage)			
Cooloola (Ocean frontage)			
Cooloola Cove			
Inskip Point South			
Inskip Point Spit			
Rainbow Beach (Estuarine frontage)			
Rainbow Beach (Ocean frontage)			
Tin Can Bay			

	Relevant / feasible
	Priority
	Not applicable