PLANNING FOR COASTAL RESILIENCE IN MAPOON

OUR COASTAL VALUES:

- Respecting and protecting cultural connections to land
- Protecting coastal areas particularly Mission Beach, Cullen Point, Back Beach and Janie Creek
- Turtle nesting sites along the foreshore
- Recreational activities including camping, fishing and beach driving
- Providing continued access to coastal areas (including vehicles)

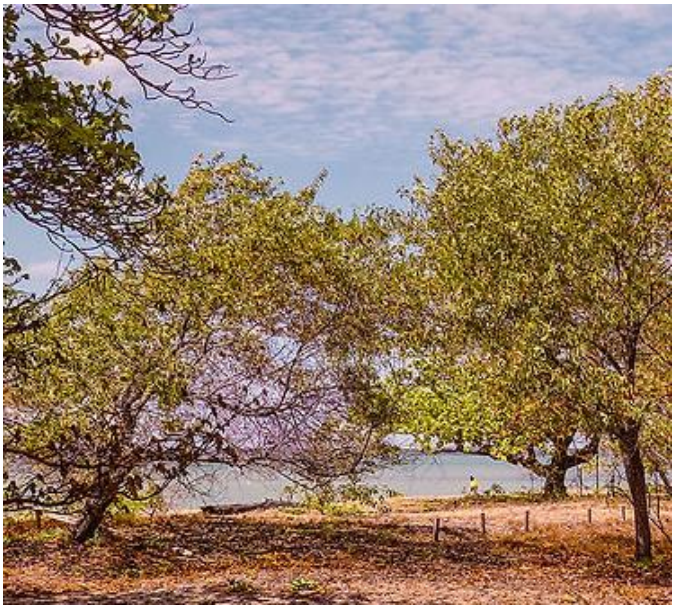
OUR STRATEGY FOR BUILDING A RESILIENT COAST

Coastal hazards like storm tide inundation, coastal erosion and sea level rise can cause temporary or permanent changes to our coastline, affecting our region's natural beauty and places of cultural and ecological significance as well as our community's infrastructure – our roads, services, drainage, homes, businesses and utilities. Council has developed a Coastal Hazard Adaptation Strategy to help plan for how we will adapt, manage and increase our resilience to the impacts of coastal hazards, now and into the future. You can view the draft Strategy and supporting material in full on Council's website or in the Council office.

SHORT TERM
Current coastal hazard risk
(0-0.3m sea level rise)

MEDIUM TERM
Coastal hazard risks around 2050
(0.3 m sea level rise)

LONG TERM
Coastal hazard risks around 2100
(0.8m sea level rise)



LOCAL ADAPTATION ACTIONS

	TIMING BASED ON SEA LEVEL RISE SHORT TERM 0M	MID TERM 0.3M	LONG TERM 0.8M
HIGH RISE			
Specific planning tools – New builds outside of hazard area	→		
Specific planning tools – Coastal building lines / development setbacks	→		
Accept the risk – Allow dunes to recede without intervention and accept there will be some damage or loss to habitat		→	
RED BEACH			
Active dune and habitat management including vegetation planting and management	→		
Specific planning tools – New builds outside of hazard area	→		
Specific planning tools – Coastal building lines / development setbacks	→		
Hazard resilient design for new/ upgraded public infrastructure	→		
MAPOON TO MISSION BEACH			
Modify local drainage network to limit excessive tidal inundation (tide gates, levees, stormwater)		→	
Hazard resilient design for new/ upgraded public infrastructure		→	
MISSION BEACH, SOUTH OF MAMOOSE STREET			
Active dune and habitat management including vegetation planting and management	→		
Site specific planning tools – New builds outside of hazard area	→		
Site specific planning tools – Coastal building lines / development setbacks	→		
Accept the risk – allow foreshore recession	→		
Relocate esplanade track		→	
Hazard resilient design for new/ upgraded public infrastructure (water and roads)			→
MISSION BEACH, NORTH OF MAMOOSE STREET			
Active dune and habitat management including vegetation planting and management	→		
Beach scraping	→		
Site specific planning tools – New builds outside of hazard area	→		
Site specific planning tools – Reduce intensity of future development	→		
Accept the risk – Operational responses for campground management	→		
Accept the risk - Emergency management response (truck or fly in goods if ramp unavailable)	→		
Upgrade boat ramp facility with a groyne	→		
Allow foreshore recession	→		
Scour protection to protect road	→		
Low earthen bunds along road		→	
BACK BEACH			
Active dune and habitat management including vegetation planting and management	→		
Localised beach scraping to prevent freshwater wetland breach	→		
Accept the risk – Allow foreshore recession	→		

*Options require further consideration and are subject to further detailed site investigations, business case, funding commitments, detailed design, and statutory approvals. The lead up time is intended to be a trigger to provide sufficient time for further consideration and detailed investigations/funding commitments and approvals to be obtained.

OUR ASSETS AT RISK

What could be affected?

- Sea turtle & shore bird nesting
- Utility infrastructure
- Culturally significant areas
- Residential areas
- Environmental significance
- Recreation areas and infrastructure
- Roads and access
- Beach & dune areas

MISSION BEACH, NORTH OF MAMOOSE STREET

Burial and cultural sites, the former Mission cemetery, boat ramp and camping area, and electricity, water and road infrastructure are presently at high to extreme risk from erosion and sea level rise. Local roads are also at high risk from storm tide inundation from 2050 onwards.

Assets at risk:

BACK BEACH

Environmentally significant turtle nesting areas, freshwater and saline wetlands and cultural sites west of Cullen Point Road to Back Beach are at high risk from coastal hazards from 2050 onwards. Vehicular access along the beach between Cullen Point and Janie Creek is presently at high risk of erosion.

Assets at risk:

MISSION BEACH, SOUTH OF MAMOOSE STREET

Dwellings, potential burial sites, and electricity and water supply infrastructure are at high risk from future sea level rise. Local roads including the esplanade are and will continue to be at high to extreme risk from erosion. These roads and Cullen Point Road will be at high risk from storm tide from 2100 onwards.

Assets at risk:

MAPOON TO MISSION BEACH

Cullen Point Road is low lying in places and vulnerable to inundation and erosion from 2050 onwards.

Assets at risk:

HIGH RISE

Residential land and water infrastructure is at high risk from erosion from 2100 onwards.

Assets at risk:

RED BEACH (MAPOON)

The beach, densely vegetated hind beach area and undeveloped esplanade area are presently at high risk from erosion. Residential land adjoining the esplanade and the water treatment plant site are also at high risk from erosion, with most impacts occurring from 2050 onwards.

Assets at risk:

NEXT STEPS...

GOVERNANCE

Collaboration and partnerships between all stakeholders is vital to maintaining and developing a resilient coastal community.

IMPLEMENTATION

An implementation plan will be prepared to guide how Council will embed the Strategy across Council business areas, programs and processes.

REVIEW & UPDATE

The strategy will be regularly reviewed to inform land use and infrastructure planning, and ensure technical information remains up to date.