

PLANNING FOR COASTAL RESILIENCE IN WEIPA

OUR COASTAL VALUES:



Protecting beaches and foreshore areas

Respecting and protecting the cultural connections between land, sea, and people



Beaches and foreshore areas for recreational activities including fishing, camping, driving and hunting



Providing continued access to coastal areas (including vehicles)

A healthy coastal environment including coastal vegetation, mangroves, and water quality.

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. Weipa Town Authority (WTA) 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 WTA's website or in the WTA 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

AWONGA POINT



Seawall to protect road and rail assets



Hazard resilient design for new/ upgraded wastewater treatment plant



Seawall to protect wastewater treatment plant



Relocate wastewater treatment plant



AWONGA POINT TO ROCKY POINT



Allow foreshore recession



Hazard resilient design for new/ upgraded wastewater pump station



Relocate wastewater pump station



ROCKY POINT



Development master planning of accommodation area (needed by 2050 onwards)



Adapt existing protection structures to offer higher level of protection to boat ramp



Seawall to protect public assets (parkland)



KUMRUMJA



Active dune and habitat management including vegetation planting and management



Beach scraping



Small scale beach nourishment



Hazard resilient design for new/ upgraded public infrastructure



Seawall to protect public assets



NANUM BEACH



Active dune and habitat management



Specific planning tools – Coastal building lines/ development setbacks



Hazard resilient design for new/ upgraded private infrastructure



Beach scraping



Allow foreshore recession (environmental area)



Small scale beach nourishment



EVANS LANDING



Specific planning tools – Coastal building lines/ development setbacks



Hazard resilient design for new/ upgraded private infrastructure



Adapt existing protection structures to offer higher level of protection



Revetment to protect assets



Raise land levels



Relocate important infrastructure



*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

AWONGA POINT TO ROCKY POINT

Sewer Pump Station A is located in this area and is at risk from storm tide inundation, erosion and sea level rise hazards from 2100 onwards. Areas of undeveloped land of environmental significance exists in this area and may become increasingly exposed to hazards.

Assets at risk:



AWONGA POINT

The road and rail connection north to Mapoon and the Andoom mine site are vulnerable to coastal erosion hazards. The adjacent wastewater treatment plant site is also exposed to current and future erosion and inundation. This facility is already approaching capacity.

Assets at risk:



ROCKY POINT

The boat ramp, road access (Marina Road) and adjacent parkland are at risk from erosion and sea level rise.

Assets at risk:



NANUM BEACH

Albatross Bay Resort, the Weipa Caravan Park are vulnerable to erosion and beach and dune areas are at high risk from sea level rise. Undisturbed, environmentally significant land is at high risk from sea level rise by 2100. Upstream along Trunding Creek, important sewerage, water supply and road assets are at extreme risk from erosion.

Assets at risk:



KUMRUMJA

The lower slopes of the rocky escarpment backing the beach are vulnerable to erosion.

Assets at risk:



EVANS LANDING

At Evans Landing there are notable areas of strategic port land at extreme risk from erosion and sea level rise. These current and future risks affect land and buildings fringing the waterfront including important community assets such as the Volunteer Marine Rescue Shed.

Assets at risk:



What could be affected?

-  Marine/boating facilities
-  Utility infrastructure
-  Culturally significant areas
-  Community facilities
-  Environmental significance
-  Recreation areas and infrastructure
-  Roads and access
-  Beach & dune areas

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 WTA will embed the Strategy across WTA 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.