

Resilient Coast Strategic Plan: a first for Queensland

Nicola Learmond, Douglas Shire Council

Douglas Shire Council has completed its strategic plan as part of the Resilient Coast Program designed to mitigate the impacts of coastal hazards on communities.

Coastal erosion and storm tides are natural processes that shape coastlines over long timeframes. However, these events become coastal hazards when they impact on communities. The Douglas Shire, located in Far North Queensland, is prone to cyclone and storm events and coastal hazards are predicted to increase with a changing climate.

The purpose of the Resilient Coast Program is to work with local communities to proactively manage and mitigate coastal hazards while developing a shared care for the coastline. The *Resilient Coast Strategic Plan 2019–2029* enables the Douglas Shire to identify and manage coastal hazards and reduce risks to its communities, environment, cultural values, infrastructure, liveability and services.

The development of the strategic plan was a transparent process with the local community and included workshops, surveys and online information sharing. The process involved tailored briefings with special interest groups, such as the Douglas Local Disaster Management Group, infrastructure managers and utility providers.

As part of the program, the existing mapping for Erosion Prone Areas and predicted storm tide inundation zones were updated for the Douglas Shire coastline. The coastal hazard assessment involved multiple event likelihoods, planning horizons and a sea-level rise prediction of 0.8 metres by 2100.

A team of coastal scientists, engineers and economists contributed to the strategic plan that recommends 35 priority actions over the coming 5–10 years. Actions include a shire-wide dune protection and maintenance program as well as shoreline erosion management plans for the Douglas Shire localities of Port Douglas and Newell Beach. Additional coastal engineering works to mitigate erosion may be viable for nominated locations by 2060. A detailed cost-benefit analysis was undertaken to inform the optimum coastal management and engineering actions and timings of those actions from 2019 to 2100.



Daniel Rodger, Jeremy Benn Pacific Director, Dr Elisa Zavadil, Alluvium Consulting Director and Nicola Learmond, Douglas Shire Council Sustainability Officer, at Newell Beach.

Image: Douglas Shire Council

The Resilient Coast Program is predominantly funded by the Queensland Government and Local Government Association of Queensland through the QCoast2100 program. In partnership with Douglas Shire Council, Alluvium Consulting Australia led the development of the Resilient Coast Strategic Plan in a consortium with Jeremy Benn Pacific, Natural Capital Economics and additional project partners.

The strategic plan is publicly available on the Douglas Shire Council Resilient Coast website.

Further information is on the Resilient Coast website at: <https://ourcoast.douglas.qld.gov.au>.