

# Cassowary Coast Coastal Hazards Adaptation Strategy

## Project Update No.1 – July 2018

### Project Overview

With over 120km of coastline and a number of offshore islands, the Cassowary Coast region and its residents are vulnerable to the long-term impacts of climate change. Cassowary Coast Regional Council (CCRC) acknowledges that coastal hazards, exacerbated by climate change, will pose risks to CCRC and its operations, the local community, economy and environment. CCRC is taking a proactive approach to managing the impacts of coastal hazards and climate change, by identifying climate change adaptation as a key focus for the region.

The Cassowary Coast Coastal Hazard Adaptation Strategy (CHAS) is proposed to improve the resilience of the Cassowary Coast region to coastal hazards, in the context of changing climate conditions. The purpose of the CHAS is to assess the risk from coastal hazards and the projected effects of climate change over the medium to long term; propose adaptation measures to respond to these impacts; and establish a strategy for the implementation of these adaptation measures.

The CHAS has been funded by the Local Government Association of Queensland (LGAQ) and CCRC, and will be developed throughout 2018 and 2019.

### Coastal Hazards and the Cassowary Coast

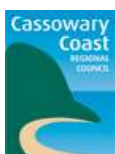
The local climate of the Cassowary Coast region is tropical, characterised by a monsoonal wet season (typically December to April) and a dry season (May to November). The climate during the wet season is dominated by prevailing north-westerly winds, and inter-annual variability of the monsoon, tropical cyclones and El Niño Southern

Oscillation (ENSO) influences variability of rainfall for the region.

Recent modelling undertaken by the Bureau of Meteorology (BoM) and CSIRO shows that climate change is projected to affect the Cassowary Coast region in the form of temperature increases, changes to rainfall, increased storm surge events, the intensity of tropical cyclones as well as a rise in sea levels.

Developed areas within the Cassowary Coast are at risk from a number of different coastal hazards. These can include:

- **Coastal erosion** – Coastal erosion occurs as waves, wind and tidal currents act in combination to move sediment away from the shoreline. This movement can be out into the ocean (erosion), over the existing dune / shoreline (deposition) or up and down the beach depending on the current (sediment transport).
- **Cyclones** – Cyclones are intense, low-pressure storms that develop over warm waters and have sustained winds of a least 63km/h. Based on the sustained wind speeds (and strongest gusts), cyclones are described and ranked according to a categorical scale between 1 and 5. For reference, Cyclone Yasi eventually reached Category 5 (winds in excess of 200 km/h).
- **Storm surge (inundation)** – Storm surge occurs during cyclone / storm events when pressure changes and wind result in increased wave heights along the coast. Where this occurs, the water level generally exceeds the normal high tide level and can result in the inundation of



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areas that are typically outside the high tide.

- **Sea-level rise** – Sea-level rise occurs as the waters in the ocean begin to warm and expand. As the sea rises, this results in both the average low tide and high tide being higher than historically experienced. This in turn means that areas previously located outside of the high tide areas may now be subject to inundation and flooding.

### What have we achieved so far?

CCRC recognises it plays a critical role as a coastal community Council and custodians of the Great Barrier Reef, as well as its wider stakeholder obligations towards the pivotal economies of tourism and agriculture.

In order to further our work to understand and respond to these obligations and better build the resilience of our region to coastal hazards and climate change CCRC has:

- Secured LGAQ funding to develop the 'Cassowary Coast Coastal Hazard Adaptation Strategy' project
- Prepared a project Stakeholder Engagement Plan
- Prepared a project Scoping Study to identify the coastal hazard issues specific to the Cassowary Coast regional context and provide the foundation for the development and implementation of adaptation strategy.

### Next Steps

The next steps in the preparation of the Cassowary Coast CHAS include:

- Identifying key assets potentially impacted across the region;
- Completing a risk assessment of key assets in coastal hazard areas;
- Identifying potential adaptation actions including undertaking a socio-economic appraisal of adaptation options; and
- Developing the strategy and local adaptation plans.

### Get involved

Council is committed to a comprehensive stakeholder consultation process throughout the length of the project. We would like to hold one-on-one meetings with stakeholder groups, as well as inviting the community to public workshops and will be seeking nominations from community delegates for the Coastal Adaptation Advisory Group. Council will be contacting stakeholder groups in the near future to arrange suitable meeting times, discuss the project further, and welcome feedback on moving forward.

### How can I stay informed?

In the near future you will be able to sign up to receive updates.

For more information about the project and Council's vision for climate change adaptation, visit Council's website, at [www.cassowarycoast.qld.gov.au](http://www.cassowarycoast.qld.gov.au).

Should you have any questions in relation to this matter, please contact Planning Services on Ph: (07) 4030 2222 or email [enquiries@ccrc.qld.gov.au](mailto:enquiries@ccrc.qld.gov.au).

