



## PROJECT UPDATE #3: September - October 2019

**The project update describes the technical scope and outputs we are undertaking to inform our long-term strategy to manage coastal hazards.**

**The Our Coast - Our Lifestyle** project team is currently progressing technical studies to better understand coastal hazards for the Burdekin region. This includes a new storm tide inundation study, and updated assessments of erosion prone areas.

### Where is the 'coastal zone'?

The Our Coast - Our Lifestyle coastal zone includes all areas of the Burdekin local government area that may be exposed to coastal hazards by 2100. This includes:

- beaches and open coast areas that may be exposed to erosion
- the extensive network of estuaries and tidal creeks in the Burdekin coastal zone
- low-lying land, and tidal and freshwater wetlands that may experience short term inundation during large weather events such as tropical cyclones and East Coast Lows, or longer-term inundation due to sea level rise.

### Storm tide inundation study

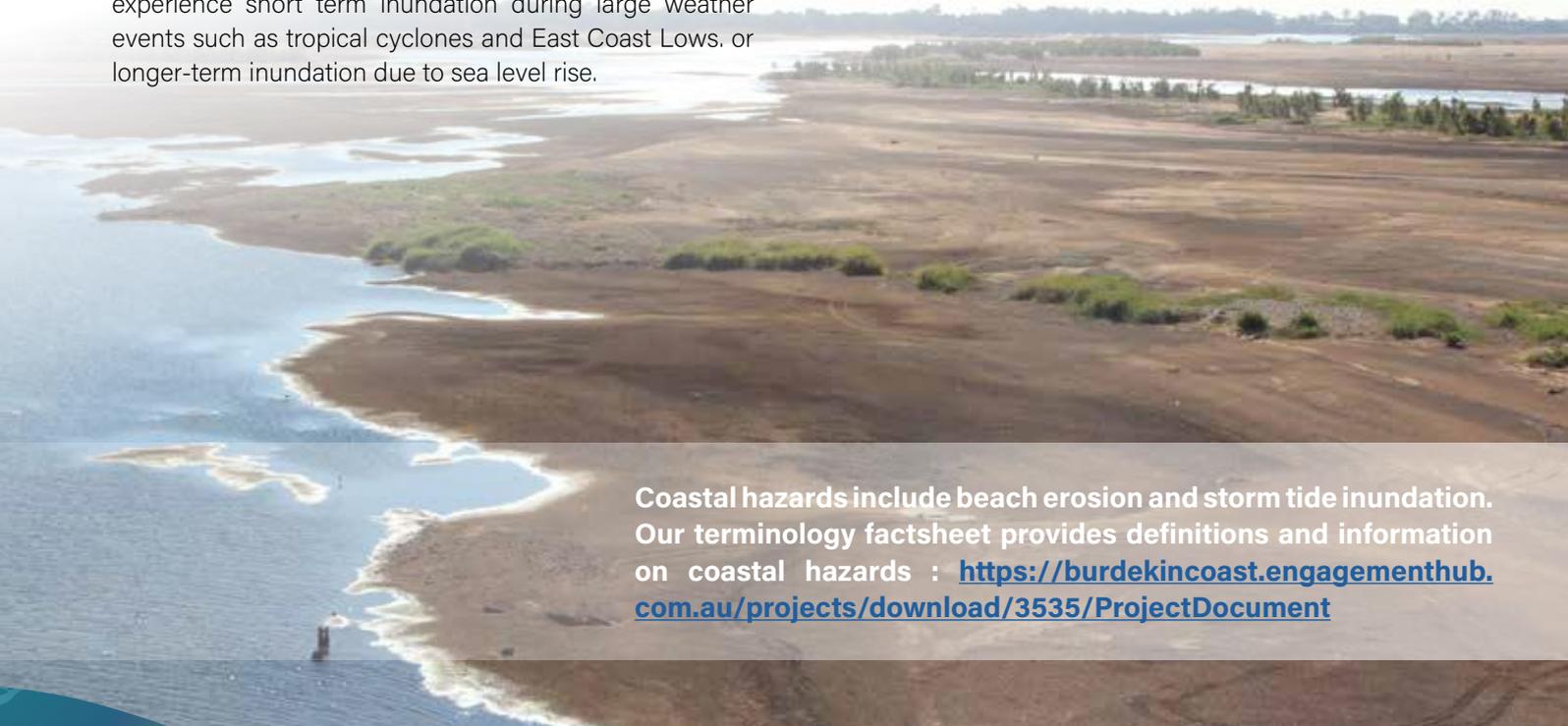
Using water levels, winds, waves and historic cyclone data, our project team are building a new storm tide model for the Burdekin region. This model will generate future storm tide projections for different possible storm events to help understand the areas that may be exposed to coastal inundation in the future.

### Erosion prone areas

The Burdekin coastline is dynamic and frequently changes in form. We are looking at all available historical information (photos, data) of the shoreline, to understand what change has happened along the coast in the past (erosion and sand movements), particularly at Alva Beach and Wunjunga.

Updated erosion modelling is then informed by known historic changes, modelled future erosion potential, and the complex dynamics of the coastline.

If you have historical data or photos of the coast we would love to hear from you. Email the project team at [ourcoast@burdekin.qld.gov.au](mailto:ourcoast@burdekin.qld.gov.au)



Coastal hazards include beach erosion and storm tide inundation. Our terminology factsheet provides definitions and information on coastal hazards : <https://burdekincoast.engagementhub.com.au/projects/download/3535/ProjectDocument>

**Website:** [burdekin.qld.gov.au](http://burdekin.qld.gov.au) (click on the Our Coast Our Lifestyle icon)

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### What coastal hazard maps already exist?

The Queensland State Government has state-wide mapping showing areas that are expected to experience coastal hazards by 2100. This includes areas that may be exposed to erosion and inundation in a major event by in the future. A major event is considered to have a 1% Annual Exceedance Probability (AEP).

**These maps are publicly available online:**

<https://www.qld.gov.au/environment/coasts-waterways/plans/hazards>

### What is AEP?

Annual Exceedance Probability (AEP) refers to the probability of an event (erosion or flood) occurring in any year. The probability is expressed as a percentage.

**For example:**

For example, a storm tide event which may be calculated to have a 1% chance to occur in any year, is described as 1% AEP. This is generally a major storm event and is often referred to as a 1 in 100-year event, however, can occur in any consecutive years and/or more than once in 100 years. The 5% and 10% AEPs represent less intense events that are likely to occur more frequently.

### What updated maps will be produced?

As part of the Our Coast – Our Lifestyle project, we are refining and updating the existing State Government coastal hazard maps for the Burdekin local government area.

Our updates will include three future time scenarios (planning horizons) and three storm events.

**Planning horizons:**

- Present day
- 2060
- 2100

**Events:**

- 10% AEP
- 1% AEP
- 0.2% AEP

The updated mapping (for erosion and storm tide hazards) will provide Council and the community with more accurate information on the current and future coastal hazards from now to 2100.

### WHAT'S NEXT?

After mapping the coastal hazard areas, we will assess what assets may be impacted. Assets can include natural, cultural and built assets. Using the new information we will explore ways to reduce (mitigate) the risk of coastal hazards, also referred to as adaptation.

Our stakeholders and community will be involved in identifying possible adaptation options. This will be the focus of future engagement activities.

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