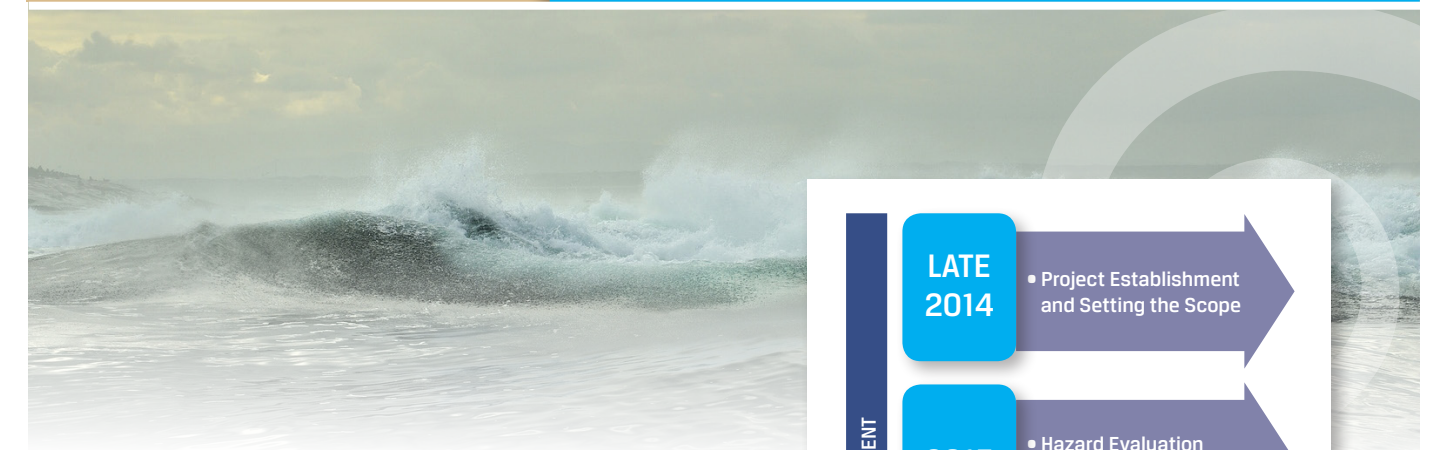
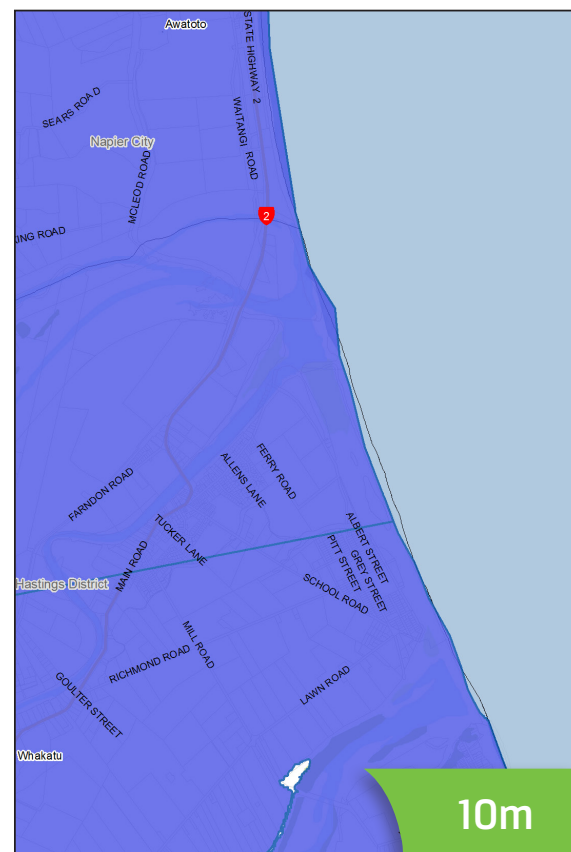


COASTAL HAZARDS IN BRIEF Clive | East Clive

How things may change through tsunami

Tsunami hazard mapping includes the potential effects of 3m, 5m and 10m waves, originating from near source (Lachlan Fault) or distant source (Chile, Peru, etc.) earthquake events. The waves are assumed to reach the coast at high tide, and conservatively represent the inland flooding that may occur from a once in every 200, 750, and 4,000 years tsunami.



**It's a fact that our community
will be more at risk from coastal
natural hazards in the future.
But good information can help us
plan and prepare for that future
over time.**

Councils and tāngata whenua groups are working together on a strategy to manage or reduce the risk from coastal hazards along the Hawke's Bay shoreline.

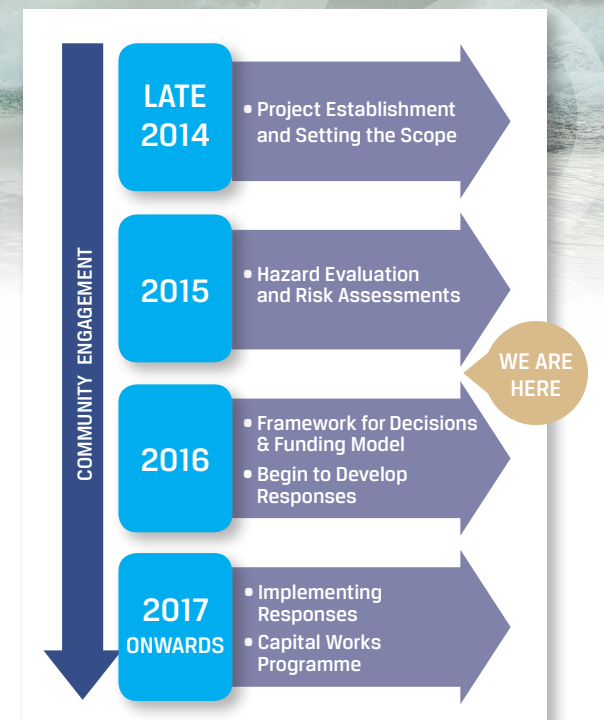
The aim is to make a more resilient community, starting with settlements from Tangoio to Clifton.

The Clifton to Tangoio Coastal Hazards Strategy 2120 will consider the risks associated with each hazard and the likely effects on human, economic, social/ cultural and environmental assets, and work with communities to develop responses to those risks.

We've identified three coastal hazards and their associated levels of risk. This new information will be added to relevant Napier and Hastings property LIMs as of 3 May 2016.

The implications for any possible update of regional or district plans is yet to be discussed. For now, we simply want you to be aware of this new information.

**There is nothing you need
to do right now.**



To determine the extent of potential hazard effects, we've modelled coastal erosion, inundation, and tsunami extents over three time periods (present day, 2065, 2120). A summary of this information is displayed on maps on the following pages.

In support of this work, a risk assessment has also been completed to consider the potential impacts of these hazards. This assessment does not consider risk at an individual landowner level, but the overall risk in terms of possible impacts on important assets along our coast such as roads, utility networks, private and public property, community infrastructure, recreation and cultural areas and environmental values.

Over the coming 12 months, we will be using this information on hazards and risks to work with the community to consider options to reduce the potential impact of these hazards. Your engagement in this process is important. The community response will be vital in ensuring our long term resilience.

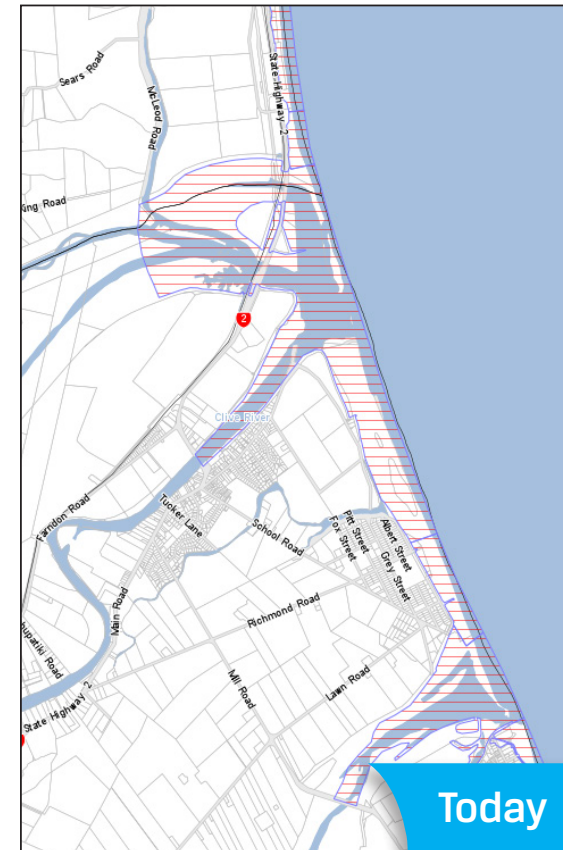
Our website has current maps that show the effects of these hazards over time, at a local community level. The reports that gave us this information are also available at hbcoast.co.nz.



COASTAL HAZARDS IN BRIEF Clive | East Clive

How things may change through coastal erosion

Coastal erosion assessment uses a 'probabilistic' approach to calculate the potential future shoreline position at 2065 and 2120. We have considered historical erosion trends, storm effects and backshore slope stability, as well as the possible effects of sea level rise. Other source data is LiDAR survey, aerial photographs, field investigations, beach profile data, numerical modelling and expert engineering judgement.



COASTAL HAZARDS IN BRIEF Clive | East Clive

How things may change through coastal inundation

Areas most likely to be affected by coastal inundation (from over-topping of beach crests) have been modelled for present day, 2065 and 2120. Predictions are based on the effects of spring/ seasonal tides, storm surge events (when waves and sea level heights elevate) and the compounding effects of sea level rise. Coastal inundation occurs as a result of wave setup, wave run-up and wave overtopping.

