



Oakura Beach Walk - 16 February 2018

KEY COASTAL FACTS

Oakura is a sandy beach with boulder reefs located offshore at the southern end. The beach is backed by cliffs at the northern end and sand dunes at the southern end.

The beach is fed by sediments coming down the Stony River (Hangatahua) and moved north by waves. Beach levels and volumes fluctuate as this sediment supply changes over time and with periods of storms and calm.

The beach has recently been getting larger, but has eroded in the past and will again in the future.

Dune planting and restoration has been occurring near the campground. The planting traps sand blowing along the shore and inland, and builds the buffer which can be used during periods of erosion.

The cliffs in front of Messenger Terrace are comprised of lahar materials. In the past, waves would have eaten into the base of the cliffs and caused them to become unstable and fall into the sea. Currently, rates of erosion are temporarily lower behind coastal protection works while the protection works remain effective.

This may not be forever. Without protection works long-term, erosion rates have historically ranged from 0.1m to 0.2m per year.

When erosion of the cliff toe causes the above cliff to become over-steepened, the cliff slumps to a more stable angle causing land atop the cliff to be lost. Once waves remove the slip material, erosion of the toe restarts. This slumping process continues above coastal protection works until a stable angle is reached.

Coastal Erosion

The coastal erosion hazard area includes future erosion of the beach and dunes by storms and changes in sediment supply, and erosion of the cliff toe and land areas above (which may become unstable).

The yellow lines show the coastal hazard area, which was calculated in 1988 and is currently in the Operative District Plan. The seaward extent of the yellow lines shows the distance the coast has eroded since this time.

The blue-shaded zone shows the area that may be affected by erosion and land instability in 100 years if erosion continues at current rates. This zone ignores coastal protection works as they may not be effective over 100 years.

Erosion rates may increase with future climate change and sea level rise. This has not been incorporated into the blue-shaded coastal hazard area but is being investigated.

Coastal Environment Area is the area which is subject to coastal influences (landscape, ecology, hazard) and where you can see or smell the sea but is generally larger than just the coastal hazard zone.





- Shoreline 2012/2013
- Draft District Plan Coastal Environment Area
- Draft District Plan Coastal Hazard Area 100yr
- Operative District Plan Coastal Hazard Area

DISCLAIMER: NPDC assumes no responsibility for the completeness or accuracy of the data displayed on the plot. To be used for indicative purposes only.