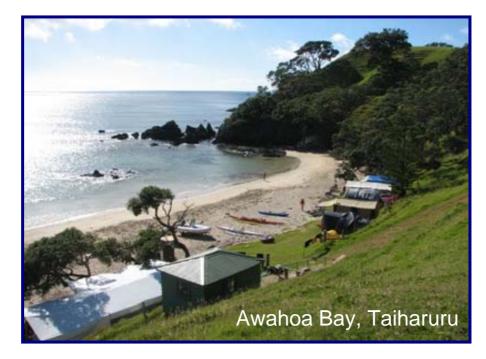
Northland's Coast and Us



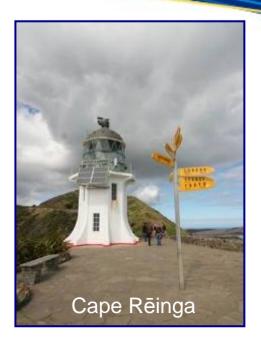
Our beaches



Where are Northland's beaches?

Nowhere in Northland is more than 40 kilometres from the coast. Northland's coast extends from Kaipara and Mangawhai Harbours in the south, to Cape Rēinga in the north and covers 3200 kilometres of coastline.

> Grab a picnic and go to the beach to enjoy the sea, sand and foreshore.





What is a beach?

What words come to mind when you think of your favourite Northland beach?

A beach slopes from the land to the sea. It can be made up of sand, shells, pebbles or a mixture of all of these.



How do Northland's beaches differ?

Each beach has its own

- colour
- composition
- sand movement
- shape
- structure

Compare and contrast a variety of beach types.



Putting Northland first

How are beaches made?

Sand, shell, rock, gravel and pebbles are slowly eroded by wind and waves causing them to break into smaller and smaller pieces – a process that can take thousands of years. Where are the biggest and smallest pieces of eroded material on your beach? What does this tell you?







How are beaches made?

Sea currents carry eroded material along the coast and deposit it on the shore. This material is made up of different types of sand and sediment.





Parua Bay



Why are our beaches always changing?

Waves and wind are constantly reshaping Northland's beaches. The resulting eroded material forms different patterns and shapes.



Start a photo or sketch diary to monitor beach change.

What beach features can be monitored for change?

- dune shape and height
- sand formation
- sand colour
- marine life
- plant life
- rock and sand pools
- shell and pebble distribution





Why does the colour of Northland's beaches vary?

Sand colour is influenced by the minerals and things it is made of. High silica content produces white sand. High iron content produces black sand.

Pārengarenga Harbour (White Sand) Pick up a handful of beach sand. What colour is it? What does it appear to be made of?



Why else do Northland's beaches vary?

The eroded material on beaches comes from many different sources. It creates different types of sand. For example, the fine brown sands of estuary beaches are made from silt washed down rivers or streams.





How does the shape of surrounding land affect beaches?

Sand movement and waves are affected by shoreline shape and structure.

Long, open, straight stretches allow sand to shift freely. Enclosed shorelines block and trap sand, and reduce wave movement. www.marinenz.org.nz to locate an aerial map of your beach. What does this tell you about how your beach was shaped?

Tutukaka Harbour

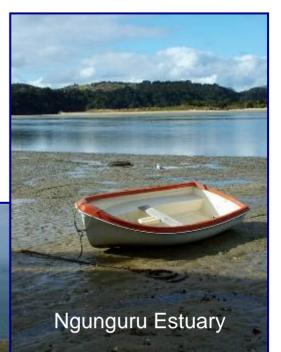
Putting Northland first

Baylys Beach

How is the look of a beach influenced by its location?

How has the look of a Northland beach been influenced by its location? Beaches in exposed areas look different from those in more sheltered harbours and estuaries.

Cape Maria van Diemen





What effect does the weather have?

The weather never rests. Prevailing winds and rain are shaping beaches day and night.



How does what's happening offshore affect the beach?

The size and consistency of ocean swells shape beaches. Big, slow swells create less change than smaller, faster ones which break with more force.



How does fresh water flowing to the coast shape our beaches and shores?

Rivers and streams carve through beaches and shorelines. As they swell with rain, or dry up in summer, they alter the shape of the shore. Stormwater outlets can also change beach shape, colour and water quality.



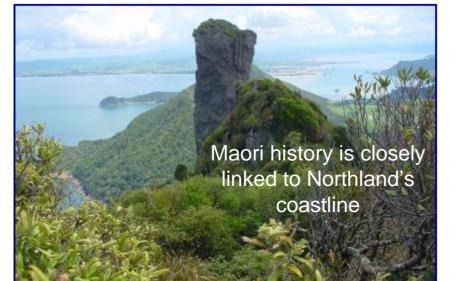
Use a GIS map of your coastal area at <u>www.nrc.govt.nz</u> to find out where water flowing from inland shapes the beach.



Why are Northland's beaches special to Maori?

As a source of identity – a sense of place.

What Maori legends or historical stories surround your beach?





Why are Northland's beaches special to Maori?

As a food basket (kete).

What memories do older Maori in your community have of gathering kaimoana on your part of the coast?



What lives on Northland's beaches?

Many living things call Northland's beaches home

Ovstercatcher

- birds
- crustaceans
- fish
- insects
- people
- plants
- shellfish

Put creatures back where you found them on the beach. What else can you do to help look after beach creatures?



Flax



penduin

What rare and endangered species are found on or around our beaches?

- Northland is home to many coastal species found nowhere else in the world
- Northland is also home to many endangered species

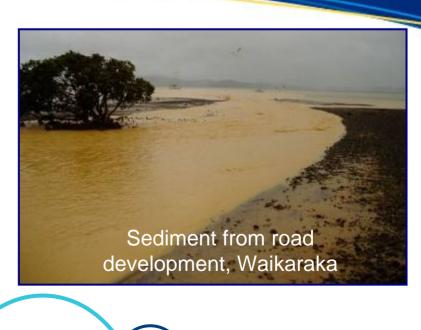
What can you do to help protect the rare and endangered species living on or around a Northland beach?



Putting Northland first

What threatens our native beach creatures?

- careless human activity
- climate change
- excess shellfish gathering
- extreme weather
- habitat destruction
- introduced pests
- pollution
- accumulation of many small effects



What are people in your area doing to minimise beach threats? How can you help?



What threatens our native beach plants?

- careless human activity
- climate change
- coastal development
- introduced weeds and plants
- erosion
- extreme weather
- habitat destruction
- animals on the beach
- accumulation of many small effects

Write a newspaper article about a local beach 'hero' who has been caring for a Northland beach.





What does Northland Regional Council do to help?

The Northland Regional Council (NRC) helps looks after beaches throughout the region.

How does the council look after our coast? Go to <u>www.nrc.govt.nz</u> to find out.





What does Northland Regional Council do to help?

Anywhere, anytime, Northland Regional Council staff are out there playing their part.



What can we do to help look after Northland's beaches?

There are lots of ways we can help look after Northland's coast. Check out websites – including the following – for ideas

www.nrc.govt.nz www.doc.govt.nz



Build your own list of what can be done to look after Northland's coast.



CoastCare Community groups

Who helps looks after our beaches?

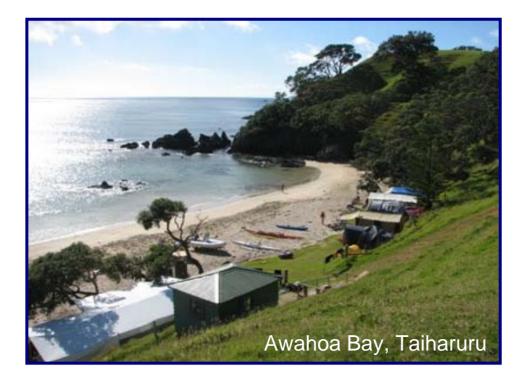
CoastCare is a partnership between the Northland Regional Council, community, iwi, district councils and the Department of Conservation. All are working together to protect and restore our region's beaches.

Check out what your local CoastCare group is doing to look after your beach at www.nrc.govt.nz/CoastCare





Northland's Coast and Us



Our beaches



have you clicked on yet? www.nrc.govt.nz

