

Coastal water quality

Northland's coastal waters are central to our regional identity. Our coast is a playground for swimming, boating and tourism, and home to aquaculture and an abundance of marine life.

Our ability to enjoy and use the coast largely relies on how healthy and clean our harbours, estuaries and swimming spots are.

The Northland Regional Council helps manage coastal water quality by monitoring its health and the effects of human activities, and seeing how it can be improved.

Pressures on our coastal water quality

Three main issues affect our coastal water quality – pathogens, excess nutrients, and sediment.

Water that contains high levels of pathogens (disease-causing organisms like bacteria) can be harmful to human health or contaminate the shellfish we eat. Bacterial contamination occurs naturally – for example, through wild bird faeces – and through human activity such as farm effluent and wastewater discharges.

Nutrients are essential for life, but an excess can harm the environment. Human-made nutrient sources such as fertiliser, wastewater and sewage overflows can create issues like toxic algal blooms.

Sediment comes from erosion, a natural process often accelerated by activities such as farming and forestry. Sediment can discolour water, reduce light levels needed to support marine plant life, reduce habitats and smother life when it eventually settles on the seabed.



At a glance

- Northland's 3200km of coastline is diverse, including 14 major harbours, many smaller estuaries and long stretches of open, sandy coast.
- Harbour water quality is affected by both natural and human-influenced contaminants.
- Water quality at popular coastal swimming sites is monitored weekly during summer to assess if bacterial levels are suitable for swimming.

State of our coast

Monitoring our coastal water quality and likely sources of contamination helps us understand changes and opportunities for improvement.



Water quality in Northland's harbours is, overall, generally good. It follows a typical pattern of better water quality in the lower harbour and reduced water quality in the upper harbour, which is nearer to contamination run-off.

However, nutrient concentrations frequently exceeded national guidelines in all three of the major harbours that are regularly monitored – Whāngārei, Kaipara and Bay of Islands. The highest concentrations were generally recorded close to stream and river mouths.

Our open coast generally has excellent water quality for swimming. Some monitored sites in enclosed harbours are occasionally unsuitable for swimming – usually after heavy rainfall – but overall meet national guidelines. Swimming water quality is monitored weekly during summer and reported using a three-tier system.

Swimming water quality status system



Green: considered suitable for swimming



Orange: considered potentially unsuitable for swimming



Red: considered unsuitable for swimming

For latest results over summer visit www.nrc.govt.nz/swimming

What is the Northland Regional Council doing?

We have a comprehensive programme for monitoring coastal water in Northland to identify how things are changing and whether anything can be done about this.

Estuary monitoring in five harbours assesses the health of the water and ecosystems and tracks change over time. A total of 74 coastal sites were monitored for swimming suitability over the five seasons to 2011.

Regular monitoring looks at water quality and heavy metal concentrations in sediment in the Bay of Islands, Whāngārei and Kaipara harbours. We also monitor resource consents for discharges to coastal waters. Occasional faecal source tracking is carried out in specific areas to see where contaminants are coming from.

Regional rules changed in 2009 to prohibit stock access to the coastal marine area. Our Environment Fund has helped fund fencing for qualifying projects.

The way land is managed can ultimately impact on coastal water quality, and we work with landowners to promote good land management practices – find out more in the Land report card.

What you can do

- If you have a boat, don't discharge untreated sewage within our harbours (do it well outside any harbour or use a marina pumping facility).
- Don't put contaminants like household chemicals, paint or oil down stormwater drains – they go straight in our streams and harbours.
- Be wary of swimming after heavy rain.
- Report pollution to our 24/7 Environmental Hotline on **0800 504 639**.

