

# Freshwater quality

Fresh water is precious – it's essential for everything we do. From drinking, washing and swimming, to nourishing the land and enabling industry, water supports life.

Everyone has a part to play in improving Northland's waters. Northland Regional Council works with landowners, iwi and hapū, and local communities, collaboratively finding the best ways to manage our freshwater resources.

## Pressures on freshwater quality

The three most problematic water contaminants in Northland are faecal pathogens, sediment and nutrients.

Pathogens get into our water via animal manure and human waste (for example, through overflows of sewerage systems during storms). Sediment comes from erosion, a natural process that's accelerated by land use activities which disturb soil. Excess nutrients – which can cause algal blooms and disturb aquatic ecosystems – come from sources like fertiliser run-off and animal urine.

Environmental incidents caused by events such as oil or sewage discharges also impact on surface water quality in Northland.

By being aware what's going into our waters and how our land is used, and working alongside landowners, district councils and

other stakeholders, we can help protect our precious waters – and the life within them – for current and future generations.



## At a glance

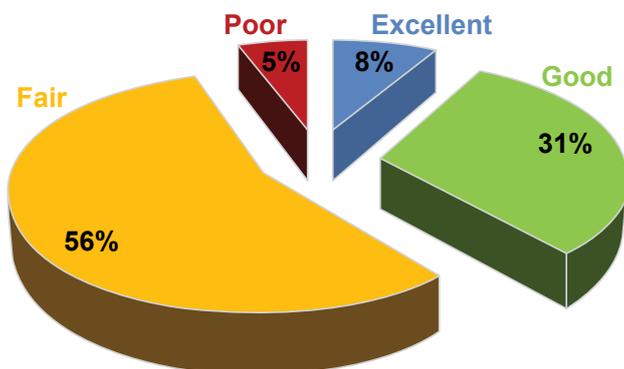
- Northern Wairoa River is our largest river, draining a catchment area of 3650 square kilometres, or 29% of Northland's total land area.
- Northland's water quality varies and tends to worsen as it flows through modified lowlands, just like other parts of New Zealand.
- Groundwater quality is generally good with the majority of monitoring samples meeting national standards for drinking water.
- Council's monitoring helps identify water quality trends and inform what work is needed to improve Northland's freshwater management.

## State of our freshwater quality

Northland's water quality varies - just as it does around New Zealand. Our groundwater quality is generally good. Surface water (in streams and rivers) is generally pristine in native forested headwaters and becomes increasingly contaminated as it flows through modified lowlands.



This varying water quality shows in monitoring results of 36 Northland river sites. A water quality index is used to grade sites against a range of environmental indicators.



*Overall water quality grade at river water quality monitoring sites*

Our most popular freshwater swimming spots are regularly monitored over summer. Poor water quality at 17 problem sites has been investigated. This showed 14 were intermittently contaminated by wildfowl, 10 by stock faeces, and five by dog faeces.

Rainfall has a big impact on water quality. Even in pristine forested catchments, like the Waipoua, elevated counts of E. Coli bacteria have been found after rainfall. As a general rule, avoid swimming for two or three days after heavy rain.

Every freshwater body is different and is used differently – one of our main goals for water quality in Northland is that waterbodies are suitable for the desired purpose.

### What is the Northland Regional Council doing?

In 2012 council launched a new 30-year programme, Waiora Northland Water, to improve the management of Northland's lakes, rivers, aquifers and wetlands.

**WAIORA  
NORTHLAND  
WATER**

The programme brings together our new and existing work – together with that of local communities – in a new, integrated approach to freshwater management. It also encompasses our work to meet new central government requirements for managing freshwater.

Our robust water quality monitoring programme includes regular monitoring of groundwater at 57 bores and six aquifers; river water quality at 36 sites; swimming suitability at up to 30 freshwater sites; lake health at 28 lakes; and farm effluent at every dairy farm in Northland.

The regional council's Environment Fund has provided more than \$4.2 million to help people improve and protect Northland's natural environment since 1996. Funded projects have included fencing of waterways and riparian planting.

Other water quality work we do includes support of environmental care groups, working with farmers to develop Farm Water Quality Improvement Plans, issuing and monitoring resource consents, running earthworks workshops, landowner advice, site investigations, working with schools, public awareness and community education.

### What you can do

- Fence off wetlands, lakes and streams to keep stock out of waterways.
- Plant along stream banks and erosion-prone land to reduce sediment and nutrient runoff getting into our waterways.
- Reconstruct wetlands in wet areas to help trap sediment and nutrients while also creating habitat for wildlife.
- Never dump motor oil, paint or household chemicals in the ground or in a stormwater drain.
- Call our 24/7 Environmental Hotline on **0800 504 639** if you spot a potential pollution threat.

For more information about Waiora Northland Water, visit [www.nrc.govt.nz/waiora](http://www.nrc.govt.nz/waiora)

