

This report card is one in a series produced to explain the current state of Northland's environment. The cards are based on the 2007 State of the Environment Report and keep you up to date on the work being done to improve our environment.

What is the State of the Environment (SoE) Report?

The report provides an overview of the current state of the environment in Northland. It is produced at five-yearly intervals – the latest published in 2007 – and presents the information gathered through the Northland Regional Council's environmental monitoring programmes.

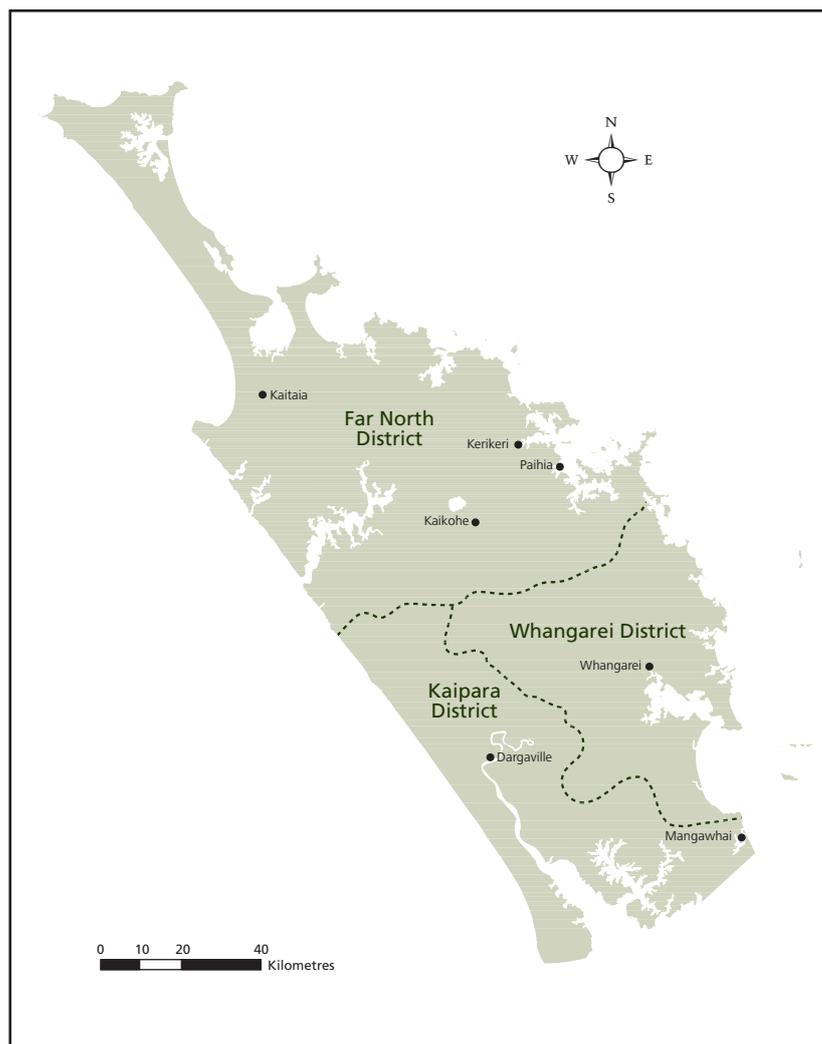
The 2007 SoE report builds on the first, published in 2002. It provides information on the pressures acting on Northland's environment, the current state of the environment and the response of the Council and the community to environmental issues.

The SoE report has more than 500 pages of information within 17 chapters. These report cards highlight the key points from each chapter and can be used individually, or as a group, to give a quick overview of the state of Northland's environment.

The full report is available at www.nrc.govt.nz/soe

Our region

Northland has a land area of 1.25 million hectares and a population of 148,470 (Statistics NZ, 2006). Local government in the region includes the Northland Regional Council and the Far North, Kaipara and Whangarei District Councils.



Who's doing the work?

The Northland Regional Council works with other agencies, iwi and local communities to protect Northland's environment.

What is the Council's role in environmental monitoring?

The Council works to sustainably manage Northland's natural and physical resources.

The Regional Policy Statement (RPS) for Northland provides a framework for the Council's work.

The Council's work includes:

- Monitoring environmental resources, including air quality, water quantity and quality, and soil conservation;



- Managing biosecurity and the control of pest plants and animals;
- Recording and reporting on biodiversity;
- Collection and disposal of waste hazardous substances;



- Monitoring compliance with resource consents and rules in Regional Plans;
- Operating a 24 hour, seven day a week Environmental Hotline for the reporting of environmental incidents; and
- Co-ordinating the Civil Defence Emergency Management Group in Northland.

Northland's unique ecological areas

Kaipara Harbour is the largest harbour in the southern hemisphere. It is internationally important for the coastal birds that live and breed there. It is also proven that 95% of West Coast snapper come from the harbour.



Lake Te Pahi is an example of a small, isolated dune lake with outstanding indigenous vegetation, including endangered species.



Maitahi Scientific Reserve is one of the largest and best examples of a fen habitat in New Zealand. Fens are extremely rare and very diverse wetland habitats. Fens have higher fertility and are less acidic than bogs however they have infertile areas within them.

Ngunguru and Mangawhai sandspits are two of the few remaining unmodified and unprotected sandspits in New Zealand. They are significant ecological environments and outstanding landscape features.



Waipoua Forest forms one of the largest remaining tracts of forest in Northland. Some of the best examples of kauri forest in the country are preserved here, including three-quarters of New Zealand's remaining kauri and two of the largest living kauri in the country.

Climate

Northland's sub-tropical climate is characterised by mild, humid and often windy weather. The region experiences, on average, 2000 hours of sunshine per year. Our winds are mostly south-westerly but tropical cyclones in the summer bring strong north-easterly winds and heavy rainfall.

Rainfall can be up to 2500mm in some areas, a third of this falling in June, July and August. High-intensity rainfall events can cause severe flooding but droughts are also common during the summer months.

In 2006, the National Institute of Water and Atmospheric Research (NIWA) studied the predicted effects of climate change on Northland's water resources over the next 30-80 years.

NIWA predicts:

- An increase in temperature, particularly during the winter months;
- No change in the amount of rainfall but a change in rainfall patterns to produce longer dry periods and an increase in higher intensity rainfall events (floods);
- Change in rainfall patterns and temperature resulting in less recharge of groundwater resources, therefore less water available for use; and
- Harsher environmental conditions for agriculture causing increased soil erosion, drought conditions and a climate more suited to subtropical grass species.

Water

Northland is only 80km wide at its widest point. As a peninsula, Northland's coastline is its most distinctive physical feature, with over 3025km of beaches, cliffs and harbours. Many of Northland's rivers are relatively short with small catchments. The Wairoa River is Northland's largest, draining a catchment area of 3650 km² (29% of Northland's land area). Most of the major rivers flow into harbours, rather than discharging to the open coast, which has significant implications for coastal water quality.

The Northland region has a large number of small and generally shallow lakes. These were formed by either dune activity, or volcanic activity, or are artificially made. Lake Taharoa of the Kai Iwi group is one of the largest and deepest dune lakes in the country – it covers an area of 237 hectares and is 37 metres deep.

Groundwater is a valuable resource in Northland and is used by many towns and rural settlements for domestic water supply, irrigation and stock drinking water. Northland also has one geothermal field around Ngawha Springs, to the east of Kaikohe.

Land

Northland has very few mountain ranges, the highest – Te Raupua in the Hokianga – being 781 metres above sea level. However, more than 100 different soil types have been identified in the region. Ecosystems of importance include rivers, lakes and wetlands, forest and shrublands and the coastal environment.

Northland's forests and scrublands feature nationally rare or declining species such as the North Island brown kiwi, North Island kōkako, Hochstetter's frog and short-tailed bats.

Pest species pose a huge threat to Northland's biodiversity and the control and management of these species is a top priority for the Council.