

Biodiversity describes the variety of life on earth. Northland has a subtropical, oceanic climate and a wide variety of habitat types which ensure the region has an unusually high diversity of plants and animals. This includes many species that can be found nowhere else in New Zealand or the world i.e. 'endemic' species.

As one of the key environmental agencies in the region, the Northland Regional Council provides advice on biodiversity. The Council also provides funding – through the Environment Fund – for landowners who want to undertake long-term land management and biodiversity projects.



Orange rata.

The 'Environment Fund' was set up 15 years ago and has provided more than \$3 million to help people improve and protect Northland's natural environment. Typically, projects have included fencing, tree-planting and pest control.

Wetlands and biodiversity

A wetland is land that is covered in, or saturated by water for at least some of the time. Wetlands occur in areas where surface water collects or where underground water seeps through to the surface. They include swamps, bogs, marshes, gumlands, saltmarshes, mangroves and some river and lake stream edges.



Dune lake at Te Pahi.



Fernbird.

Land and Biodiversity performance targets

To promote the sustainable management of land, including soil, water, and ecosystems in the Northland region by:

- Promoting sustainable land management practices by providing advice on land use alternatives, land development techniques, soil conservation and drainage.
- Promote and support community based 'coast care' projects.
- Developing and promoting indigenous biodiversity policies for Northland, including designing and setting up an indigenous biodiversity database for Northland.
- Supporting biodiversity protection and enhancement on private land, by community groups, and through the Environment Fund.

Key points 2009-2010

- The Council's land management team responded to 188 sustainable land management enquiries during 2009-2010.
- The most popular enquiries were biodiversity (32), land information (29), wetlands (16), erosion control (13), catchment management (12) and threatened flora/fauna (9).
- More than \$3 million has been awarded through the Environment Fund, to help people improve and protect Northland's natural environment.
- Approximately \$500,000 was granted during 2009-2010.
- More than 800 of Northland's wetlands have been identified and ranked for ecological value.
- 25 meetings on sustainable land management were held with groups representing dairy farming, beef and sheep farming, pastoral farming generally, production forestry and primary industry consultants.

Land and Biodiversity

In the past wetlands in Northland covered around 258,451 hectares or 32 percent of the land area. Just 5.5% or 14,114 ha of the original wetland area remains. Some of the wetlands being lost in Northland are unique and therefore irreplaceable.

In 2009-2010 the Council initiated the Top Wetlands Project. This project identified and ranked more than 800 of Northland's remaining wetlands. The best and most irreplaceable of these have been prioritised for management and protection.

The next part of the project will involve developing care standards – how to care for the different types of wetlands.

Biodiversity website

Biodiversity Northland is a collection of people from different agencies and groups who are involved with caring for Northland's natural values. The Northland Regional Council is managing the project and in 2009-2010 a map-based website of biodiversity information was created.

The website provides free web-based access to data on biodiversity and natural areas within Northland and includes information about:

- Reserve and covenant boundaries.
- Habitat survey information.
- Weed and pest sites.
- Landcare group locations.

You can visit the website at www.biodiversitynorthland.org.nz

Land management

Soil Conservation Project

Sediment is the major contaminant of rivers, estuaries, harbours and inshore waters in Northland. It affects land productivity, water quality, ecological health and flooding throughout the region. The Council has a soil conservation initiative which is closely aligned to the Priority Rivers Project and the Council's work on water quality.

Priority catchments – 27 of them – have been assessed and areas of erosion (both current and potential) identified.



An example of a type of erosion targeted by the Soil Conservation Project.

Maps of each catchment have been produced to show where the erosion sites are.

The information enables areas to be targeted for soil conservation initiatives, including planting native trees, poplars and willows, preparing farm plans and encouraging land use changes of marginal pasture land.

Why is sediment a problem?

- Sediment contaminates rivers, estuaries, harbours and inshore waters in Northland.
- It can smother aquatic life and change the nature of river beds and estuaries, encouraging the growth of mangroves.
- It reduces water quality and carries other contaminants, such as illness-causing bacteria and nutrients.
- It reduces the value of water bodies for activities such as gathering kaimoana and swimming.
- It is very costly to remove sediment to make water suitable for drinking.
- It reduces channel capacity and increases the risk of flooding.
- It builds up the ground level on flood plains, increasing the frequency with which buildings, roads and other infrastructure flood.
- It is costly to remove from water bodies.

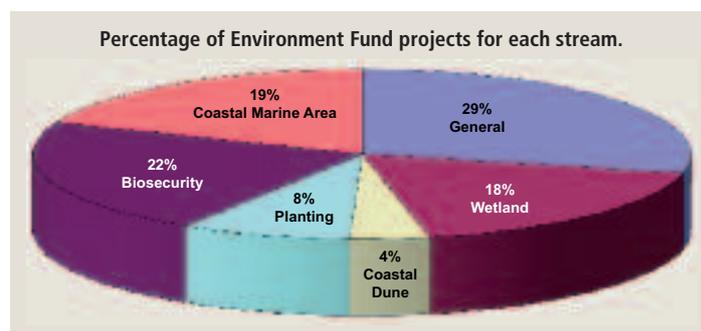
Environment fund

The 2009-2010 season has been as successful as ever, with many outstanding projects completed.

Number of projects by District and percent of total projects completed.

District	Number of projects	%
Far North	54	43.5
Whāngārei	43	34.7
Kaipara	27	21.8
	124	100

Note: Some projects received funding through more than one funding stream.

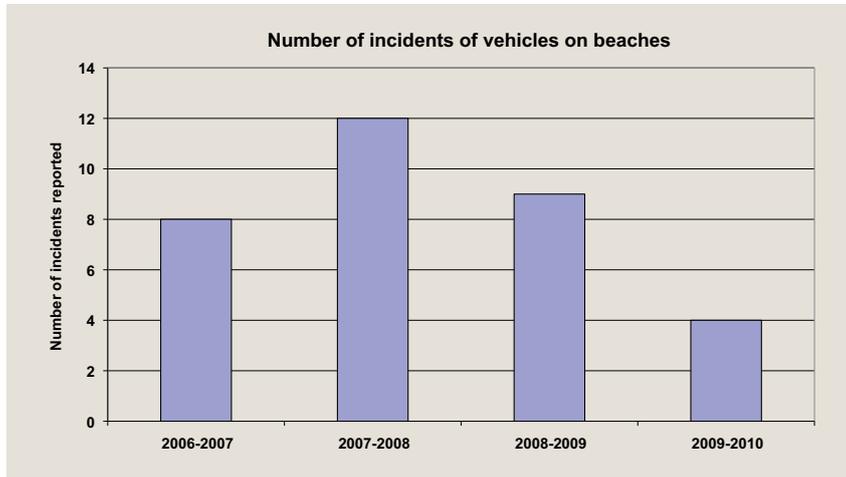


In 2009-2010 the Environment Fund was revised to align with regional land management priorities which will make the fund more efficient, targeting resources towards improved land management outcomes. The new funding streams are:

- Soil conservation;
- Biodiversity;
- Coastal;
- Water quality; and
- Exceptional projects.

Safe beach driving

The Northland Regional Council has been coordinating a multi-agency Safe Beach Driving education programme to promote safer and more environmentally conscious beach driving practices. The programme was started in 2006 due to concerns about the safety of beach users from dangerous beach driving, and damage caused to the sand dunes and beach environment.



Beach information events have been held to raise awareness of the potential dangers to beach users and the environment of inappropriate vehicle use on beaches. Over the summer 2009-2010 events were held at Baylys Beach, Tokerau Beach (Karikari Peninsula), Ahipara (90 Mile Beach), and Bream Bay. These included information displays and multi-agency beach patrols. Other events such as fishing competitions, roadside fatigue stops and community events were also attended.



CoastCare Northland

CoastCare aims to protect and restore dune systems through establishment, education, resourcing, and on-going support of community-based CoastCare groups. The programme started in 2005 and now has thirty groups around Northland's coast.

For many groups – such as Baylys Beach Protection Society and Waipapakauri Coastal Care group – a priority was fencing dunes and planting with spinifex and pingao. More than 11,000 spinifex and pingao plants were provided to CoastCare groups in 2009-2010. For more information about CoastCare Northland, or for groups operating in your area, visit www.nrc.govt.nz/coastcare or join us at www.facebook.com/CoastCareNorthland

CASE STUDY: Taipā Beach

In May 2008 Taipā CoastCare was formed as a sub group of the Taipā Beach Improvement Society. During 2008 the group planted 800 spinifex provided by the Council, with assistance from school students and local residents. The group also constructed walkways and temporary fences to protect the plants.

Throughout the year Taipā CoastCare members are down at the beach most days, releasing the spinifex from weeds such as kikuyu, which disrupt their growth, as well as maintaining the walkways and fences. Students from the Taipā Area School have been very active in assisting with planting and weeding, and a junior CoastCare group has been formed.

In 2009 six more accessways were put in, and a further 600 spinifex and 600 pingao plants were planted, funded through the Regional Council's Environment Fund.

