Land

Soil plays a huge role in the productivity of our land and the water quality in our rivers.

Primary production is a major contributor to Northland's economy. Its future depends on maintaining the productive capacity of our soils.

The big challenges facing Northland's land are the need to keep valuable hill country soils on hills and out of our waterways, and retaining prime soil areas for primary production.

Pressures on land

All types of land use, from natural areas through to intensively farmed, influence water movement and quality.

Much of Northland's land has moderate to severe erosion potential, so when used for production its limitations need to be carefully managed. Erosion from steep land reduces its productive capacity and increases sedimentation in our waterways.

Intensification of farm stocking rates, if not managed properly, can promote erosion, as can exotic forestry that's logged and not replaced. Intensive farming can also cause pugging and compaction – testing indicates an overall significant decline in macroporosity (the large pore spaces in soil) over the last decade.

Competing demands on our best soils are another pressure on our land, particularly from an economic point of view. While areas of 'highly versatile soils' have been identified throughout the region – accounting for around 10% of our total land area – to date there has been little control over small lot and residential subdivisions on this precious land resource.

At a glance

- Northland's land is 46% pasture, 14% exotic forest, 1% horticulture and 32% indigenous forest.
- Only about 10% of Northland's land area is considered to have highly productive soils.
- Soil loss rates appear to have reduced since the mid 1970s, thanks to improved farm pasture cover and afforestation of large areas of marginal hill country during the 1980s.
- Farming, forestry and horticulture collectively contribute 13.7% of Northland's Gross Domestic Product (GDP).

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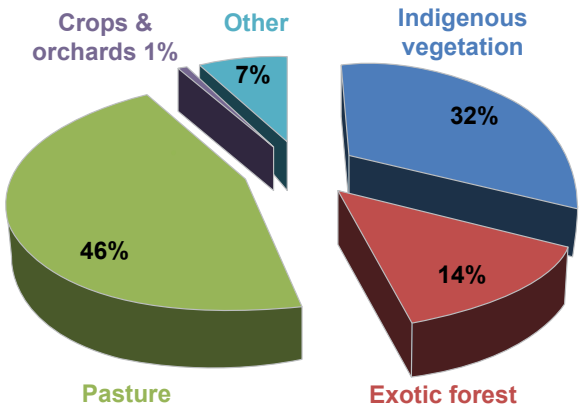
State of our land and soil

Nearly half of Northland's land is used for pastoral farming. Dairy herd size is growing and dairy farms are getting larger, although Northland's total dairy farming area has decreased since 2008. Beef cattle numbers are relatively static, but more intensive farming systems can lead to decreased water and soil quality.



How Northland's land is used

Over the five-year period of this report, there has been a 7.4% reduction in Northland's exotic forestry area (consistent with trends in other parts of the country). The reason for this could be increasingly accurate exotic forestry area statistics.

Large areas of prime soils continue to be subdivided for lifestyle blocks and urban development.

Run-off from eroding earthworks and changes in land use is continuing to cause contamination of waterways.

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What is the Northland Regional Council doing?

More council resources than ever before are being put into soil conservation and water quality improvement initiatives.

We provide advice and information to landowners throughout the region via our land management staff, website, guidelines, publications and events. We also work with industry partners to support and promote good land management practices.

The regional council's Environment Fund provides grants totalling nearly $500,000 each year to help landowners with soil conservation and water quality improvement initiatives.

Our soil monitoring programme is bringing improved knowledge of soil types and soil quality around the region. The council monitors 24 sites at five-yearly intervals, with the next re-sampling due in 2015/16.

The Regional Water and Soil Plan contains rules relating to earthworks and vegetation clearance on erosion-prone land and within riparian management zones to help reduce the risk of accelerated erosion and sediment production.

What you can do

- Plant fast-growing trees like poplars and willows to help stabilise erosion-prone land.
- Fence stock out of gullies, drains and waterways to prevent erosion and faecal contamination.
- Manage stock grazing to minimise pugging and soil degradation.
- Contact the council's Land Management team on **0800 002 004** for advice and information on soil conservation, nutrient management and water quality.

For the full State of the Environment Report 2012, visit www.nrc.govt.nz/soe

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