



NATIONAL
LAND RESOURCE
CENTRE

New Zealand: Status, trends & priorities in soil management

Dr Alison Collins

Knowledge and Information on the use of New Zealand's Greatest Asset



Landcare Research
Manaaki Whenua

STATUS

A taste of NZ (1)

- NZ geologically young, tectonically active
- Highly variable - common soils - brown & pumice soils
- Erosion rates are on average 10 times global rates
- Maori assets and role

A taste of NZ (2)

- 55% of land in NZ under agriculture, forestry & horticulture (supporting >25% GDP)
- Soil managers therefore often farmers
- Agriculture not subsidized , but regulated – key drivers of change -market access & social license to operate

A taste of NZ (3)

- Pressure to increase GDP growth has led to even more intensive land use on stony hill country
- Rising energy prices & availability of land for forestry
- But also
 - elite & wealthy expansion of urban areas
 - hill country soil loss through erosion



Taste of NZ (4)

- Science-based evidence valued to drive best practice & policy
- But endemic issues with underpinning science:
 - Capability
 - Investment
 - Evidence base -gaps
 - Data deluge
 - Uncertainty& provenance
 - Technology transfer

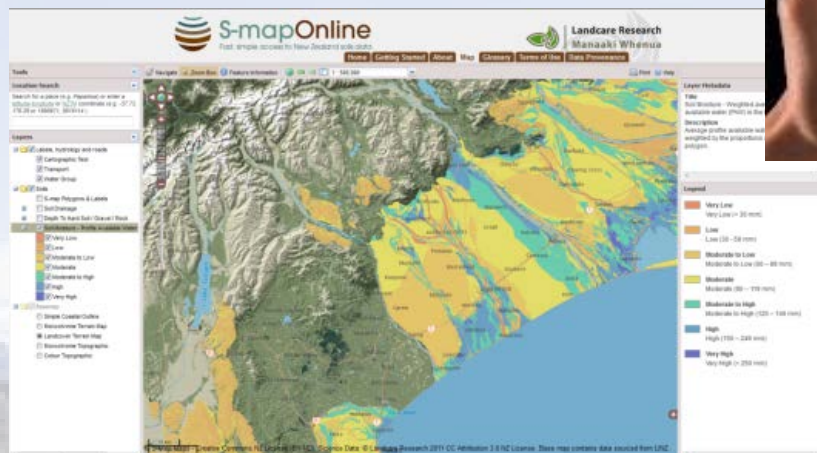
TRENDS

Precision

Getting 'more from less'

Precision:

- Irrigation
- Effluent
- Nutrient application



'Smart use'

- 'Multi-functional landscapes' (ES)
- Diversification – **resilience** to threats (natural & economic)
- Waste as a resource – e.g. metal waste to fortify crops
- New **socio-economic collaborative** management systems
 - high value activities on elite and versatile soils fragmented across multiple enterprises
 - 'terroir' with shared capital infrastructure and co-governance

Partnership & consolidation

- Moving towards working collectively across science, business and government
- Established Land & Water Forum - working towards collaborative, participatory decision-making model
- Established **National Land Resource Centre**



A gateway to New Zealand's land information and services



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Science

Projects

Across New Zealand a wide range of science projects are taking place in land resources.



LCDB3

Landcare Research has announced the release of a new land cover database of New Zealand.



SLURI

A collaborative research programme that conducts research on sustainable management and use of soils.



Resources

Resources

The one-stop shop to authoritative land resource data, tools, information and services



Quantum Map

NIWA Quantum Map is a free, open source, desktop mapping tool based on the popular Quantum GIS application.



LRIS Portal

The Land Resource Information Systems (LRIS) Portal is a repository of authoritative New Zealand science datasets and information.



News and Events

Latest News

Land Use Recovery Plan
Environment Canterbury has received a direction from the Canterbury Earthquake Recovery Minister, Gerry Brownlee, to...



Upcoming Events

NZARM Annual Conference 2012. Land Use, Water: A world of Difference
Further information on this event will be listed here when it is published.



Latest from NLRC

NZLRI and LUC workshop
Experts meet to discuss future development of the New Zealand Land Resource Inventory (NZLRI) and...



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Training Needs Survey

Help us build capacity across all sectors. Complete our short survey.



NZ Landcare Trust



NZ Landcare Trust works on a range of field based projects.

The Great NZ Science Challenge

This is your chance to have a say on the major Science challenges facing our country.

Join the debate!



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Tell us about a resource
Did we miss something? Tell us about it.
ADD A RESOURCE

Mapping
Interactive on-line 'Mapping' allow you to visually explore different aspects of New Zealand's land resources.

Tools
Search for 'Tools' to support efficient land management and use of land resources.

Technologies
Become familiar with 'Technologies' arising from science or business in the area of land resources.

Physical collections
There are a variety of 'Physical Collections' available to the public for research purposes relating to land resources.

Organisations
Search for related organisations.

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Explore current and up-coming projects.

Courses & Training
View our current courses & training options.

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Showing 1 - 10 of 121 results matching wellington

- Grow Wellington**
Grow Wellington was set up as a result of the Wellington Regional Strategy (WRS) which was developed by the nine local authorities in the region.
- Department of Conservation - Wellington-Kapiti**
The Department of Conservation (DOC) is a government department which was formed under the Conservation Act 1987. This DOC website has information that relates specifically to the Wellington-Kapiti region.
- Wellington City Council**
The Wellington City Council is responsible for a wide range of services for their district include looking after their community, local roads, water, sewerage and refuse collection, libraries, parks, recreation services, local regulations, community and economic development, and town planning.
- Wellington Tenth's Trust**
The Wellington Tenth's Trust was established to

1 2 3 4 5 6 7 8 9 10

Only resources with a defined geographic area will appear on the map.



Capability development

Erosion of
knowledge –
approaching
'Peak
knowledge?'

- Codify
- Training



How much do you agree with the following statement. There is a need to build capacity in soil and land resource science and/or management in my organization?

		Response Percent
Strongly Agree	<div></div>	34.0%
Agree	<div></div>	45.3%
No Opinion	<div></div>	17.0%
Disagree	<div></div>	3.8%
Strongly Disagree		0.0%

Communication

1. 'Soil literacy' big issue – public engagement
2. Technology transfer – barriers to uptake
 - better access to science information
 - customised delivery



PRIORITIES

Priorities for NZ

1. Biggest priority – find ways to manage soil to allow **both economic growth and environmental protection**
2. Increase '**soil literacy**' in public and stakeholders (NZSSS)
3. Build evidence base through increased investment into science – **national science challenges**
4. Learn from, harmonise with, **international initiatives**
5. Work towards a **national policy statement** on soil/land
6. Embed soil protection into business/primary industry **best practice**

