



**Manaaki Whenua**  
Landcare Research

Manaaki Whenua – Landcare Research is a research organisation of dedicated scientists, researchers and experts committed to helping New Zealanders understand and live well with our land.

We want to ensure all New Zealanders have the knowledge and tools to live productively with our land and preserve it sustainably for future generations.

Soil and landscape processes underpin the productivity and health of New Zealand's land and freshwater ecosystems. Our research looks at how soils and landscapes respond to climatic and human-induced pressures, evaluating current risk, and offering sustainable land management and land use options.

We work with stakeholders across New Zealand, including national, regional and local government, Maori, the primary production sector, the science and research sector and the general public to achieve meaningful impact for our science.

Our current research capabilities include:

- Soil mapping and land capability assessment, including digital soil modelling.
- Soil health, biology and toxicity assessment and management
- Soil erosion processes and management
- Soil carbon, nitrogen and trace element cycling, including contaminant loss
- Soil water storage and movement
- Soil chemistry and physics laboratories, including in-field sensing technologies
- Modelling of soil processes at scales from the soil profile to the nation
- Management of the nationally significant soil data repository, and web portals for soil and land environment information.

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# Soil Science for Our Land and Our Future

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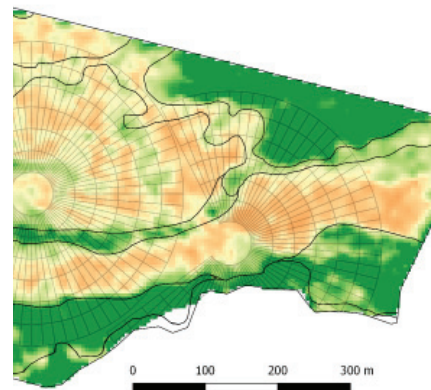


## Soils Portal – a major resource for soils information

The soils portal provides online access to a wealth of soil data and information that Manaaki Whenua – Landcare Research manages on behalf of New Zealanders.

The Soils Portal contains data from the National Soils Data Repository, Digital Soil Surveys, S-map database, and geospatial land environment datasets. There is also a wealth of explanatory information about soils, including current and historical soil-naming schemes used in New Zealand, as well as a digital library of historical soil reports for a wide range of topics and areas for New Zealand.

It's an invaluable resource used by anyone interested in soil data – land and environmental managers, farmers, students, researchers and policy-makers. The soils portal can be found at [soils.landcareresearch.co.nz](http://soils.landcareresearch.co.nz)



## National Soils Data Repository – meeting today's soil data demands

The National Soils Data Repository (NSDR) is a comprehensive soil observation database that now hosts the original National Soils Database as well as a growing repository of sites with analytical measurement data from across New Zealand.

The NSDR can generate new information about soils cost-effectively from a diverse set of data sources, allowing integration of a range of resources such as soil quality data, National Soils database data, and S-map observations.

You can visit the NSDR to view soils data via the Soil Portal link above.



## S-map and S-map Online – mapping soils across New Zealand

S-map is Manaaki Whenua's ongoing project to integrate and map New Zealand's soil resources. S-map Online is the web delivery service for S-map.

The coverage of S-map varies between regions. Hawkes Bay [100%], Waikato [72%], Bay of Plenty [59%] and Canterbury [46%] have the highest S-map coverage. S-map supports a vast array of research applications at local and regional scales and will, once completed enable national scale analyses. Soil information from S-map is widely used to support decisions on nutrient, effluent and irrigation management; crop production and suitability; modelling of hydrology, ecosystem services and climate change impact; as well as land valuation, education, and land planning.

Using S-map Online you can:

- Explore interactive soil maps
- Learn about the soil in your area
- View detailed information about a soil class or attribute
- Create custom PDF soil maps for printing
- Download soil factsheets for specific locations.

S-map Online can be accessed at [smap.landcareresearch.co.nz](http://smap.landcareresearch.co.nz) or via the Soils Portal.



## For more information, contact:

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