FSL New Zealand Soil Classification

Title

Fundamental Soil Layer - New Zealand Soil Classification

Creator

Landcare Research NZ Ltd

Publisher

Landcare Research NZ Ltd

Date

2000-01-01

Description

The soil fundamental data layers (FDLs) contain spatial information for 16 key attributes, each of which is measurable (i.e. is given a numeric value rather than being assigned to a descriptive class or category) and is recorded in appropriate units of measure. Since attributes have measurable values, FDLs are particularly useful in computer modelling and have enabled researchers and resource management decision-makers to make the most of rapid developments in GIS technology. Key soil attributes were selected through a consultation process with stakeholders, and generally fall into three groups: soil fertility/toxicity, soil physical properties (particularly those related to soil moisture), and topography/climate (T). Parameters include slope, potential rooting depth, topsoil gravel content, proportion of rock outcrop, pH, salinity, cation exchange capacity, total carbon, phosphorus retention, flood interval, soil temperature, total profile available water, profile readily available water, drainage, and macropores (shallow and deep). Regional soil databases were the key to generating FDLs. New Zealand was subdivided into several geographic regions and soil scientists were allocated a region for which they developed a ‘regional legend’, i.e. database. Regional data were correlated using the New Zealand Soil Classification (NZSC), referenced to the National Soils Database (NSD) and other relevant data sources, and then linked to the soil polygons in the New Zealand Land Resource Inventory (NZLRI). This layer holds the NZSC data upon which the remaining FSLs were based.

Source

Regional soil databases were the key to generating FDLs. New Zealand was subdivided into several geographic regions and soil scientists were allocated a region for which they developed a ‘regional legend’, i.e. an attribute database matching all soils to all 16 soil attributes. Regional data were correlated using the New Zealand Soil Classification (NZSC), referenced to the National Soils Database (NSD) and other relevant data sources, and then linked to the soil polygons in the New Zealand Land Resource Inventory (NZLRI).

Rights

Because this layer is based on the NZLRI, limitations associated with the multi-factor, homogeneous unit area mapping, method of the LRI tends to result in themes being delineated at lower resolution than a single factor map of equivalent scale.

Rights

Survey date and therefore currency of data, varies from 1960s to 2000. While every effort has been made to supply a nationally consistent data set, there may be variations in classification, attribute values and scale and precision of mapping depending on time and region of soil data collection.

Rights

NZLRI mapping scale remained constant (at 1:63,360 and later 1:50,000), however, polygon resolution increased in detail as the survey progressed, and was variably constrained by the quality of source information available to the mapper (e.g. original soil maps).

Coverage

-46.744158 166.345905 -34.268191 179.420142

Format

Shapefile

Identifier

http://lris.scinfo.org.nz/layer/79/

Type

vector

Language

en

Subject

Environment

Subject

Farming

Subject

Planning/Cadastre

Subject

Biota

Subject

Soil

Subject

Classification

Subject

Downloadable Data