Title Soil Landscapes of the Penrith 1:100,000 sheet

Abstract

This map is one of a series of soil landscape maps that are intended for all of central and eastern NSW, based on standard 1:100,000 and 1:250,000 topographic sheets. The map provides an inventory of soil and landscape properties of the area and identifies major soil and landscape qualities and constraints. It integrates soil and topographic features into single units with relatively uniform land management requirements. Soils are described in terms of soil materials in addition to the Great Soil Group and Northcote classification systems.

Related Datasets: The dataset area is also covered by the mapping of the <u>Soil and Land Resources of the Hawkesbury-Nepean Catchment interactive DVD</u>.

Online Maps: This and related datasets can be viewed using <u>eSPADE</u> (NSW's soil spatial viewer), which contains a suite of soil and landscape information including soil profile data. Many of these datasets have hot-linked soil reports. An alternative viewer is the <u>SEED Map</u>; an ideal way to see what other natural resources datasets (e.g. vegetation) are available for this map area.

Reference: Bannerman S.M. and Hazelton P.A., 2011, *Soil Landscapes of the Penrith* 1:100,000 *Sheet* report, digital reprint, Office of Environment and Heritage, Sydney.

Bannerman S.M., Hazelton P.A. and Tille P.J., 2010, *Soil Landscapes of the Penrith* 1:100,000 Sheet map, reprint, Department of Environment, Climate Change and Water, Sydney.

Resource locator

Data quality statement

Name: Data quality statement

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

DQS - Soil Landscapes of the Penrith 1:100,000 sheet

Function: download

Show on eSPADE Web Map Name: Show on eSPADE Web Map

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

View dataset on eSPADE spatial viewer.

Function: download

GIS data

Name: GIS data

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Download shapefile and ESRI layer file

Function: download

Soil landscape map Name: Soil landscape map

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Download high quality JPG map

Function: download

NSW Government Online Shop Name: NSW Government Online Shop

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Purchase hardcopy map from Shop.DPIE website

Function: download

Soil map information Land and soil information	Name: Soil map information			
	Protocol: WWW:DOWNLOAD-1.0-httpdownload			
	Description:			
	Web page about soil maps in NSW.			
	Function: download			
	Name: Land and soil information			
	Protocol: WWW:DOWNLOAD-1.0-httpdownload			
	Description:			
	Web page about land and soil information in NSW.			
	Function: download			
Soil landscape reports	Name: Soil landscape reports			
ιεμοιτο	Protocol: WWW:DOWNLOAD-1.0-httpdownload			
	Description:			
	Download complete soil landscape report & individual landscape descriptions.			
	Function: download			
Soil landscape data package	Name: Soil landscape data package			
	Protocol: WWW:DOWNLOAD-1.0-httpdownload			
	Description:			
	Download complete package: GIS data, soil landscape reports and JPG map. Function: download			
Unique resour	ce identifier			
Code	34442f2a-e6e1-4c32-8375-6ef0cdb2cdaa			
Presentation form	Map digital			
Edition	1.0			
Dataset language	English			
Metadata standard				
Name	ISO 19115			
Edition	2016			
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/34442f2a-e6e1-4c32-8375-6ef0cdb2cdaa			
Purpose	Support natural resource management and decision making.			
Status	Completed			
Spatial representation				
Туре	vector			
Geometric Object Type	surface			
Geometric	622			

Spatial refere	nce system		
Code identifying the spatial reference system	4283		
Equivalent scale	1:None		
Additional	GIS Field name descriptions		
information source	CODE - Soil landscape code NAME - Soil landscape name PROCESS - Process Group of the soil landscape. Groups are named after either recent or current land-forming processes, or conditions that influence soil parent material or soil type. Descriptions of these groups are available within soil landscape reports and on the DPIE website. LANDSCAPE - A string combining process group and the soil landscape code. The first two capital letters are the process groups abbreviation and the remaining letters are the soil landscape code. VERSION - Version number Available Formats • View online using eSPADE Spatial viewer • Download JPG map, report or GIS ESRI shapefiles(.shp) & layer files (.lyr) from SEED data portal. • Purchase a hard-copy map from Shop.DPIE • Soil profile points data is also available in MS spreadsheet format by contacting the data custodians at soils@environment.nsw.gov.au		
Topic categor	the data custodians at soils@environment.nsw.gov.au		
Topic categor Keyword set	the data custodians at soils@environment.nsw.gov.au		
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	the data custodians at soils@environment.nsw.gov.au y GEOSCIENCES-Geology GEOSCIENCES-Geomorphology		
Keyword set	the data custodians at soils@environment.nsw.gov.au geosciences-Geology Geosciences-Geomorphology HAZARDS-Flood		
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Keyword set	geosciences-Geology Geosciences-Geomorphology Hazards-Flood Hazards-Landslip Land-Geography Soil Soil-Chemistry Soil-Physics		
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Object Count

South bounding latitude	-33.498424
NSW Place Name	Penrith 1:100,000 map sheet
Vertical extent information	
Minimum value	-100
Maximum value	2228
Coordinate reference system	
Authority code	urn:ogc:def:cs:EPSG::
Code identifying the coordinate reference system	5711
Temporal extent	
Begin position	1988-01-01
End position	N/A
Dataset reference date	
Resource maintenance	
Maintenance and update frequency	Unknown
Contact info	
Contact position	Data Broker
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water
Telephone number	131555
Email address	data.broker@environment.nsw.gov.au
Web address	https://www.nsw.gov.au/departments-and-agencies/dcceew
Responsible party role	pointOfContact

Lilleage

Provisional soil landscapes were established, based firstly on the dominant geomorphic process responsible for the formation of the landscape and secondly, on the geological parent material. The boundaries of these provisional soil landscapes were mapped using stereoscopic interpretation of 1:40,000 black and white aerial photographs transferred onto 1:25,000 base maps. After field checking these boundaries and detailed investigation of the soils, the provisional landscapes were confirmed, amalgamated or sub-divided. The resulting soil landscapes are presented on the map at 1:100,000 scale in groups based on their dominant geomorphic process.

Soils were examined and described in detail at 142 sites and inspected at many hundreds more over the 21 soil landscapes. At each described site, soil morphological data and site information were recorded on Soil Data Cards and later transferred into the Soil and Land Information System (SALIS). 37 soil samples were collected for laboratory analysis.

The GIS shapefile linework has been updated to reflect latest hydrology data. Therefore small differences will occur between the shapefile and hard copy map.

Limitations on public access

Scope	dataset
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DQ Completeness Commission

Effective

date 1990-06-0

Explanation

Each soil landscape generally has a representative profile (type profile) for each sublandscape (facet) within it. Soil landscapes with difficult access may have very little to no soil profile descriptions. The number of soil profile descriptions and observations are within the recommended range specified in the Australian Soil and Land Survey Handbook (Reid 1988). Soil landscape polygons less than 40 hectares and elongated polygons less than 300 m wide are generally not shown unless they are unusually significant.

DQ Completeness Omission

Effective date

2009-01-10

DQ Conceptual Consistency

Effective date

1990-06-01

Explanation

The map and report have been checked for technical consistency and compliance with soil landscape map series standards. Map unit concepts and polygons, major soil types and soil landscape descriptions have been field verified (field edited) by a peer soil surveyor. Soil landscape boundaries have been checked and refined using iterative field and aerial photo checks. Logical consistency of vector data was assessed at the time of map digitisation.

DQ Topological Consistency

Effective date

1900-01-01

Explanation

ArcGIS was used to ensure all polygons in the shapefile are topologically correct.

DQ Absolute External Positional Accuracy

Effective date

1990-06-01

Explanation

Boundaries between soil landscapes are drawn as solid lines where they could be delineated reliably and broken lines where they were more diffuse or difficult to identify. Solid line boundaries are generally accurate within 100m. Dashed line boundaries are generally accurate within 100 to 250m. Dotted line boundaries are generally accurate within 250 to 400m.

Observations and soil profile numbers are located onto the field sheets in the field. Location is determined by map reading (with accuracy to 25m) and where this is not possible using Global Positioning Systems (with accuracy within 100m). Field sheets are digitised to 13m accuracy.

DQ Non Quantitative Attribute Correctness

Effective

date

1990-06-01

Explanation

Soil landscape map units are individualised by unique combinations of soil type, topography, geology, vegetation, land use existing erosion/land degradation and constraints to development. The land and soil attributes in this product were predominately assessed from field observations and aerial photo interpretation.

Soil laboratory tests are undertaken for at least one representative sample for each soil material. Where possible, the chemical test methods adopted are the same as those in Raymond and Higginson (1992). Single test results provided for each soil material are intended as a guide only and variation in physical and chemical properties within each soil material should be anticipated.

Soils were examined and described in in the field. At each site, soil morphological data and site information were recorded on Soil and Land Information System (SALIS) cards. Sufficient field work was undertaken within each soil landscape to identify the range of soils present and to enable their distribution within the landscape to be described.

Responsible party

Contact position Data Broker

Organisation name NSW Department of Climate Change, Energy, the Environment and Water

Telephone number 131555

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Responsible party role pointOfContact

Metadata point of contact

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Responsible party role pointOfContact

Metadata date 2024-02-26T13:44:00.417744

Metadata language