Title

Soil and Land Resources of Central and Eastern NSW

Abstract

This map is a compilation of seven published Soil and Land Resource products which contain baseline natural resource information for the:

- Hawkesbury-Nepean catchment
- Liverpool Plains catchment
- Merriwa Plateau
- Moree Plains
- Murray catchment
- Australian Capital Territory
- Hunter Region

These products were undertaken to enhance knowledge of soils, landscapes and physical constraints to land use in the urban and rural environment. The information will assist in informed decision making, planning and environmental modelling throughout the catchments. The Soil and Land Resource mapping for the Merriwa Plateau and Moree Plains were funded to especially improve existing soil landscape information so more accurate Land and Soil Capability (LSC) and Soil Fertility information would be available to upgrade future Biophysical Strategic Agricultural Land (BSAL) mapping under NSW Strategic Regional Land Use Policy (SRLUP).

One thousand, one hundred and seventeen map units have been described in this combined Soil and Land Resource product. Each soil landscape unit is an inventory of soil and landscape information with relatively uniform land management requirements, allowing major soil and landscape qualities and constraints to be identified. Soils are described using the Australian Soil Classification and the Great Soil Groups systems.

Online Maps: Part of this area is also covered by other soil mapping products, see the soil map index in eSPADE. eSPADE 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 SEED Map; an ideal way to see what other natural resources datasets (e.g. vegetation) are available for this map area.

Reference: Office of Environment and Heritage, 2018, *Soil and Land Resources of Central and Eastern NSW*, Version 3, NSW Office of Environment and Heritage, Sydney.

Resource locator

Data Quality Statement	Name: Data Quality Statement Protocol: WWW:DOWNLOAD-1.0-http--download Description: DQS - Soil and Land Resources of Central and Eastern NSW 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
Soil and land resource data package	Name: Soil and land resource data package Protocol: WWW:DOWNLOAD-1.0-http--download Description: Download package: shapefile and reports Function: download
Land and soil information web page	Name: Land and soil information web page Protocol: WWW:DOWNLOAD-1.0-http--download Description: About land and soil information in NSW - DPIE's data systems and map products.

	Function: download
DPIE's Land and soil website	Name: DPIE's Land and soil website Protocol: WWW:DOWNLOAD-1.0-http--download Description: Soil information, mapping & management; land degradation & geodiversity. Function: download

Unique resource identifier

Code	62ddf08a-8d6a-423d-9ae4-43551f65cad5

Presentation form	Map digital
Edition	3.0 (v180206)
Dataset language	English

Metadata standard

Name	ISO 19115
Edition	2016

Dataset URI	https://datasets.seed.nsw.gov.au/dataset/62ddf08a-8d6a-423d-9ae4-43551f65cad5
Purpose	Support natural resource management and decision making.
Status	Completed

Spatial representation

Type	vector
Geometric Object Type	surface
Geometric Object Count	44667

Spatial reference system

Code identifying the spatial reference system	4283

Equivalent scale	1:None

Topic category

Keyword set

keyword value	SOIL SOIL-Erosion SOIL-Chemistry

	SOIL-Physics
	LAND
	LAND-Topography
	HAZARDS-Landslip
	HAZARDS-Flood
	VEGETATION
	LAND-Use
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16

Geographic location

West bounding longitude	143.21361
East bounding longitude	152.80518
North bounding latitude	-36.80588
South bounding latitude	-28.53716
NSW Place Name	Central and Eastern NSW

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	2008-08-01
End position	N/A

Dataset reference date

Resource maintenance

Maintenance and update frequency	As needed
Contact info	
Contact position	Data Broker
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water
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Responsible party role	pointOfContact

Lineage

The mapping undertaken by the NSW Government (Department of Conservation and Land Management, Department of Land and Water Conservation, NSW Department of Environment and Climate Change and Water and Office of Environment and Heritage) was created using:

Liverpool Plains - * existing published soil landscape mapping (Curlewis, Blackville, Tamworth, Baan Baa – Liverpool Plains portion and Murrurundi 1:100,000 map sheets); * existing draft soil landscape mapping for parts of Tambar Springs, Boggabri, Manilla and Coolah 1:100,000 sheets within the Liverpool Plains Catchment.. It was co-funded by the Natural Heritage Trust.

Hawkesbury-Nepean - * existing published soil landscape mapping (Braidwood, Sydney, Wallerawang, St Albans, Katoomba and Gosford/Lake Macquarie 1:100,000 map sheets); * existing unpublished 1:100,000 scale mapping, co-funded by the Sydney Catchment Authority. * new mapping and upgrading of existing mapping for parts of Oberon, Bathurst, Wollongong, Penrith, Moss Vale, Mt Pomany, Cessnock, Mudgee and Howes Valley 1;100,000 sheets within the Hawkesbury Nepean Catchment. Co-funded by the Natural Heritage Trust.

Merriwa Plateau -+ * existing published soil landscape mapping (Blackville and Murrurundi 1:100,000 map sheets); * new mapping and minor upgrading of existing mapping for parts of Merriwa, Muswellbrook Gulgong, Coolah, Blackville and Murrurundi 1:100,000 map sheets. Funded by National Partnership Agreement through the NSW Department of Primary Industries.

Moree Plains - * new soil landscape mapping covering the following complete or part 1,100,000 map sheets: Thallon, Burrenbar, Boomi, Goondiwindi, Yetman,Mogil Mogil, Bunarba, Moree, Croppa Creek, Collarenebri, Bunna Bunna, Bellata, Gravesend, Pilliga, Wee Waa, Narrabri, Gwabegar, Baradine and Baan Baa. Funded by National Partnership Agreement through the NSW Department of Primary Industries.

Murray catchment * existing published 1:100,000 scale soil landscape mapping (Holbrook and Wagga Wagga soil landscapes) with some improved delineation of rolling and steep terrain on Siluran granite parent materials on the Holbrook sheet. * existing unpublished reconnaissance 1:100,000 scale soil landscape mapping with minor linework rectification, Southern Comprehensive Regional Assessment (SCRA) project mapping covering the Kosciuszko and Jacobs Creek map sheets; * Existing unpublished reconnaissance 1:250,000 – 1:500,000 scale soil mapping, collected as part of the Healthy Soils, Healthy Landscape project; * New linework at reconnaissance 1:100,000 scale (Rosewood and Yarrangobilly map sheets).

Australian Captial Territory - * existing published soil landscape mapping (Canberra and Michelago 1:100,000 map sheets); * new soil landscape mapping (part Brindabella and Tantangara 1:100,000 map sheets).

Hunter Region * existing published 1:100,000 soil landscape mapping (Blackville, Dungog, Murrurundi, Port Stephens, Sydney, Newcastle, St Albans, Wallerawang, Gosford/Lake Macquarie 1:100,000 map sheets). Some linework and attribute changes were made in these mapping areas;

- existing published 1:100,000 soil and land resources mapping (Hawkesbury Nepean Catchment, Merriwa Plateau and Liverpool Plains) Some linework and attribute changes were made in these mapping areas;
- new mapping for partial or entire Gulgong, Merriwa, Muswellbrook, Camberwell, Ellerston, Upper Manning, Wingham, Camden Haven, Bulahdelah, Foster, Mudgee, Mount Pomany, Howes Valley, Cessnock 1:100,000 map sheets.

Other existing mapping including Soil Landscapes of the Dubbo and Singleton 1:250,000 sheets and Soil Landscapes of the Hunter Councils Region where also used when upgrading mapping for the catchment.

For all datasets, provisional soil landscapes were established firstly on the dominant geomorphic processes responsible for the formation of the landscape and secondly on the geological parent material. Generally the boundaries of these provisional soil landscapes were mapped using stereoscopic interpretation of aerial photographs, topographic map data, and SPOT imagery. LANDSAT thematic mapper, ADS 40 imagery, DEM and radiometric imagery were also used to assist with perception and charting of provisional soil landscapes. For Moree Plains and the western part of the Murray, radiometrics correlated very well to different aged and type of alluvial/colluvial material and were used extensively to delineate soil map unit boundaries.

Map boundaries were captured on topographic map sheets at 1:25,000 or 1:100,000 scale or captured on-screen at approximately 1:10,000 scale. After field checking boundaries and detailed investigations of the soil, the provisional landscapes were confirmed, amalgamated or sub-divided. Soils have been examined and described in detail at over 8210 sites. At each site, soil morphological data and site information were recorded on Soil and Land

Information System (SALIS) cards or through eDIRT. 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.

Limitations on public access

Scope: dataset

DQ Completeness Commission

Effective date: 2015-04-30

Explanation: All polygons in the GIS layer are labeled with a MasterCode (CODE), MasterName (NAME), dominant geomorphic process group (Process_D) and sub-dominant geomorphic process group (Process_SD). Field, technical and general editing has occurred on this dataset.

DQ Conceptual Consistency

Effective date: 2015-04-30

Explanation: Map unit concepts and polygons, major soil types and soil landscape descriptions have been field verified by a peer soil surveyor or soils quality officer. Soil landscape boundaries have been checked and refined using iterative field and aerial photo checks.

DQ Topological Consistency

Effective date: 2018-01-25

Explanation: ArcGIS was used to ensure all polygons in the shape file are topologically correct. Water polygons have been removed from the spatial linework, and can be gaps within the mapping. All polygons have a unique identifier.

DQ Absolute External Positional Accuracy

Effective date: 2018-01-25

Explanation: The accuracy of this map coverage varies across the mapping area, depending on the scale that the map polygon boundaries were created at. Soil boundaries using mapping published at 1:100,000 scale are generally accurate to within 100m. This includes all linework for Hawkesbury Nepean, Liverpool Plains, Merriwa Plateau, Moree Plains, ACT, Hunter-Central Rivers and some areas of the Murray catchment. In the remaining areas of the Murray, soil boundaries using SCRA reconnaissance level soil landscape mapping are generally accurate to within 250m and between 100-250m for the new updated reconnaissance mapping on Rosewood and Yarrangobilly 1:100,000 map sheets. Reconnaissance 1:250,000 Riverina mapping are accurate to within 250-500m. Map One shows the different mapping types and scales for Central and Eastern NSW. Observations and soil profiles were located using handheld GPS (accurate to 5 - 50 m) or using 1:25,000 topographic maps.

DQ Non Quantitative Attribute Correctness

Effective date: 2015-04-30

Explanation: Soil landscape map units are individualised by unique combinations of soil type, topography, geology, geomorphic process containing variations in vegetation, land use, existing erosion/land degradation and constraints to development. The land and soil attributes in this product were predominately assessed using field observations, remote sensing interpretation (satellite, radiometric and ADS40) and limited laboratory analysis where available.

Responsible party

Contact position	Data Broker
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water
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Responsible party role	pointOfContact

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Metadata date

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Metadata language