Title

Soil Landscapes of the Lismore-Ballina 1:100,000 Sheets

Abstract

The soil landscape sheet provides a soil and landscape inventory of the area covering Mullumbimby, Byron Bay, Casino and Kyogle and identifies major soil and landscape limitations for both urban and rural development. This is a series of soil landscape maps based on the Land and Property Information 1:100,000 topographic map series and is designed to provide soil and landscape resource information which can be easily understood. The use of the soil landscape concept permits the integration of both soil and topographic constraints into one unit so that the map can be viewed in terms of limitations for urban and rural development. Soils are described in terms of soil materials in addition to the Great Soil Group and Northcote soil classification systems.

Related Datasets: The dataset area is also covered by the mapping of Acid Sulphate Soil Risk Mapping.

Online Maps: This and related datasets can be viewed using eSPADE (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 SEED Map; an ideal way to see what other natural resources datasets (e.g. vegetation) are available for this map area.

References: Morand D.T., 1994, *Soil Landscapes of the Lismore-Ballina 1:100,000 Sheets* report, NSW Department of Land and Water Conservation, Sydney.

Morand D.T., 2009, *Soil Landscapes of the Lismore-Ballina 1:100,000 Sheets* Ed. 2 map, NSW 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 Lismore-Ballina 1:100,000 Sheets 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 and report from Shop.DPIE website

	Function: download
Soil map information	Name: Soil map information Protocol: WWW:DOWNLOAD-1.0-http--download Description: Web page about soil maps in NSW. Function: download
Land and soil information	Name: Land and soil information Protocol: WWW:DOWNLOAD-1.0-http--download Description: Web page about land and soil information in NSW. Function: download
Soil landscape data package	Name: Soil landscape data package Protocol: WWW:DOWNLOAD-1.0-http--download Description: Download complete package: GIS data, soil landscape reports and JPG map. Function: download
Soil landscape reports	Name: Soil landscape reports Protocol: WWW:DOWNLOAD-1.0-http--download Description: Download complete soil landscape report & individual landscape descriptions. Function: download

Unique resource identifier

Code	dc831619-231d-4322-ba7a-2d51a52bdda0

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/dc831619-231d-4322-ba7a-2d51a52bdda0
Purpose	Support natural resource management and decision making.
Status	Completed

Spatial representation

Type	vector
Geometric Object Type	surface

Geometric Object Count	835

Spatial reference system

Code identifying the spatial reference system	4283

Equivalent scale

1:None

Additional information source

GIS Field name descriptions

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 and report 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 category

Keyword set

keyword value	AGRICULTURE
	GEOSCIENCES-Geology
	GEOSCIENCES-Geomorphology
	HAZARDS-Fire
	HAZARDS-Flood
	LAND-Topography
	SOIL
	SOIL-Chemistry
	SOIL-Erosion
	SOIL-Physics
	VEGETATION

Originating controlled vocabulary

Title	ANZLIC Search Words
Reference date	2008-05-16

Geographic location

West bounding longitude	153.00107

East bounding longitude	153.667731
North bounding latitude	-28.998412
South bounding latitude	-28.498409
NSW Place Name	Lismore and Ballina 1:100,000 map sheets

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	1990-04-01
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

Lineage

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. The boundaries of these provisional soil landscapes were mapped using stereoscopic interpretation of 1:25,000 scale colour aerial photographs. LANDSAT thematic mapper imagery was used to assist with perception and charting of provisional soil landscapes. These boundaries were transferred onto 1:25,000 topographic base maps. After field checking boundaries and detailed investigations of the soil, 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 processes. A colour has been allocated to each group

Soils were examined and described in detail at over 390 sites. At each site, soil morphological data and site information were recorded on Soil Data System cards. Sufficient field work was undertaken within each soil landscape to identify the range of soil materials present and to enable their distribution within the landscape to be described.

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

In edition two of the map, some line work changes have occurred with the creation of the following new soil landscape variants: mid, mba, epa, epb, rob, bpa, tya, tyb, tyc, xxa. Variant a of mb soil landscape has been removed in this edition. Some amendments to geomorphic process groups have occurred to the ck soil landscape. These changes are not reflected in the report but present on the map and shapefile.

Limitations on public access

Scope: dataset

DQ Completeness Commission

Effective date: 1994-11-01

Explanation: Each soil landscape generally has at least six soil profile descriptions. Each soil landscape with difficult access has at least two 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: 2001-01-01

DQ Conceptual Consistency

Effective date: 1994-11-01

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: 1994-11-01

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

DQ Absolute External Positional Accuracy

Effective date: 1994-11-01

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	1994-11-01
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
Email address	data.broker@environment.nsw.gov.au
Web address	https://www.nsw.gov.au/departments-and-agencies/dcceew
Responsible party role	pointOfContact

Metadata point of contact

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Metadata date

2024-02-26T13:42:44.547198

Metadata language