Title

Estimated Inherent Soil Fertility of NSW

Abstract

This map provides an estimation of the inherent fertility of soils in NSW. It uses the best available soils and natural resource mapping developed for the Land and Soil Capability (LSC) dataset.

The mapping describes soil fertility in NSW according to a five class system outlined below:

- Low (1)
- Moderately low (2)
- Moderate (3)
- Moderately high (4)
- High (5)

It was derived from a lookup table system linking a fertility class to a particular soil type (Great Soil Group), which was then attributed for each soil map unit (see Table 1 in data package).

Online Maps: This dataset 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.

Reference: Department of Planning, Industry and Environment, 2021, *Estimated Inherent Soil Fertility of NSW*, Version 4.5, NSW Department of Planning, Industry and Environment, Parramatta.

Resource locator

Show on SEED Web Map

Name: Show on SEED Web Map

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

Description:

Display dataset on SEED's map

Function: download

Data quality statement

Name: Data quality statement

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

Description:

DQS - Estimated Inherent Soil Fertility of 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

Inherent Soil Fertility data package

Name: Inherent Soil Fertility data package

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

Description:

Download package: shapefiles, ESRI layer files and metadata documents.

Function: download

ArcGIS REST Map Service

Name: ArcGIS REST Map Service

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

Description:

Connect to REST map services using ArcGIS or ArcGIS online map viewer.

	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
Web Map Service (WMS)	Name: Web Map Service (WMS) Protocol: WWW:DOWNLOAD-1.0-http--download Description: Connect to WMS using your GIS Function: download
KML Service	Name: KML Service Protocol: WWW:DOWNLOAD-1.0-http--download Description: Download KML for use in Google Earth. Function: download
Web Map Tile Service (WMTS)	Name: Web Map Tile Service (WMTS) Protocol: WWW:DOWNLOAD-1.0-http--download Description: Connect to WMTS using your GIS. Function: download

Unique resource identifier

Code	ad9366d4-59da-4ce3-89d9-36bb2404b5e3

Presentation form	Map digital
Edition	4.5
Dataset language	English

Metadata standard

Name	ISO 19115
Edition	2016
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/ad9366d4-59da-4ce3-89d9-36bb2404b5e3
	Support natural resource management and decision making. It is one of the primary

Purpose	datasets used to create the regional Biophysical Strategic Agricultural Land (BSAL) maps under the NSW Government's Strategic Regional Land Use Policy.
Status	Completed

Spatial representation

Type	vector
Geometric Object Type	surface
Geometric Object Count	41761

Spatial reference system

Code identifying the spatial reference system	4283

Equivalent scale

1:None

Additional information source

Version changes

Improvements incorporated into version 4.5 include:

- Revision of some fertility classifications for far north coast region and Cobargo area.
- Minor adjustments to linework and attributes for the Hunter Region (version 2)
- Updated linework and attributes for Camden Haven 1:100,000 map sheet area
- Addition of in the attribute table.
- Minor linework edge-matching in north coast area along with small fixups to linework and associated attributes across NSW.

GIS field name descriptions

Fert_code - Dominant estimated inherent soil fertility classification code

Fert_name - Dominant estimated inherent soil fertility classification name

Fert_class - Combined dominant estimated inherent soil fertility classification code and name

Version - Version number of linework product

VersDate - Date of version completion

Topic category

Keyword set

keyword value	SOIL
	SOIL-Chemistry
	SOIL-Physics
	SOIL-Erosion
	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	141.001
East bounding longitude	153.66
North bounding latitude	-37.507
South bounding latitude	-27.998
NSW Place Name	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	2009-06-09
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
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

The best available soils datasets were sourced to provide a single (seamless where possible) layer across the area. Datasets collated to derive this map included:

- published and draft 1:100,000 soil landscape mapping [1:100,000 scale]
- published and draft 1:250,000 soil landscape mapping [1:250,000 scale]
- Soil and Land Resources of the Hawkesbury Nepean Catchment [1:100,000 scale]
- Soil and Land Resources of the Liverpool Plains Catchment [1:100,000 scale]
- Soil and Land Resources of the Merriwa Plateau [1:100,000 scale]
- Soil and Land Resources of the Moree Plains [1:100,000 scale]
- Soil and Land Resources of the Hunter Region [1:100,000 scale]
- Reconnaissance Soil and Land Resources of the Murray CMA Catchment [1:100,000 & 1:250,000 scale]
- Soil Landscapes of the SCA Hydrological Catchments [1:100,000 scale]
- Soils landscapes of the Comprehensive Coastal Assessment (Bare Point, Jervis Bay, Batemans Bay and Ulladulla) [1:100,000 scale]
- Southern Comprehensive Regional Assessment [1:100,000 scale]
- Northern Comprehensive Regional Assessment [1:100,000 scale]
- Reconnaissance soil landscapes of the Namoi CMA [1:100,000 scale]
- Reconnaissance soil landscapes of the Upper Riverina (HSHL) [1:100,000 scale]
- Reconnaissance soil landscapes of the Border Rivers/Gwydir CMA [1:100,000 scale]
- Brigalow Belt South Western Regional Assessment [1:100,000 scale]
- Reconnaissance Soil Landscapes of the Upper Macleay Catchment [1:100,000 scale]
- Upper Murrumbidgee Soil Benchmarking project [1:100,000 scale]
- Glen Innes Data Gap Reconnaissance Soils Mapping [1:100,000 scale]
- Soil Information for the Nyngan 1:250,000 sheet [1:250,000 scale]
- Soil Information for the Walgett 1:250,000 sheet [1:250,000 scale]
- Soil Information for the Gilgandra 1:250,000 sheet [1:250,000 scale]
- Reconnaissance soil landscapes of the Riverine Plains [1:500,000 scale]
- Land Systems of the Western NSW [1:250,000 scale]
- Land Systems of the Cobar Peniplain Bioregion [1:250,000 scale]

Each polygon was assigned a dominant soil type (Great Soil Group), from which a fertility value was derived using a lookup table modified from Charman (1978) (See Table 1 in data package).

It is known that other soil types will exist in most if not all polygons, thus the map provides a guide to the most likely fertility of the soil. Assumptions made in the allocation of soil fertility mapping include:

1. The dominant soil type allocated to each polygon is representative of that area.
2. The dominant soil type has the typical characteristics/properties of soils classified under the Great Soil Group classification.

Limitations on public access

Scope dataset

DQ Completeness Commission

Effective date 2001-01-01

DQ Completeness Omission

Effective date: 2017-05-05

Explanation: All polygons were labelled with a soil fertility class as per the classification. A limited, targeted internal desktop review has been completed for the soil type (Great Soil Group) field used in the production of this map. In addition a more thorough desktop triage quality check has been completed for soil type (Great Soil Group) field covered within the New England/North West, Upper Hunter, Central West, Greater Southern Highlands and Sydney Canberra Corridor Strategic Regional Land use Priority areas.

DQ Conceptual Consistency

Effective date: 1900-01-01

DQ Topological Consistency

Effective date: 2021-10-20

Explanation: ArcGIS was used to ensure all polygons in the feature class are topologically correct. (cluster tolerance 0.000003 DDeg).

DQ Absolute External Positional Accuracy

Effective date: 2020-10-27

Explanation: The accuracy of this map coverage varies across NSW, as map polygon boundaries were derived from many different sources and scales (see lineage). Soil boundaries using published and draft 1:100,000 scale mapping by DPIE are generally accurate to within 100 m. Soil boundaries using published or draft 1:250,000 scale, SCA and reconnaissance 1:100,000 - 1:250,000 level soil landscape mapping are generally accurate to within 250 m. Land Systems is a different style of mapping however is published at a scale of 1:250,000 and is generally accurate to within 250 m. Some small alignment issues may occur from issues with the digitizing process when first captured years ago into a digital format. Smaller scaled datasets (1:500,000) are approximate and generally accurate to within 500 m.

DQ Non Quantitative Attribute Correctness

Effective date: 2020-10-27

Explanation: The accuracy of this map coverage varies across NSW, as map polygon boundaries were derived from many different sources and scales (see lineage). Soil boundaries using published and draft 1:100,000 scale mapping by DPIE are generally accurate to within 100 m. Soil boundaries using published or draft 1:250,000 scale, SCA and reconnaissance 1:100,000 - 1:250,000 level soil landscape mapping are generally accurate to within 250 m. Land Systems is a different style of mapping however is published at a scale of 1:250,000 and is generally accurate to within 250 m. Some small alignment issues may occur from issues with the digitizing process when first captured years ago into a digital format. Smaller scaled datasets (1:500,000) are approximate and generally accurate to within 500 m.

The accuracy of attributes used to derive this map coverage varies across NSW, as map polygon boundaries were derived from many different sources and map scales. A data source diagram (see figure one in data package) shows these different datasets and their quality according to the data confidence classification outlined below:

- High (1) - All necessary soil and landscape data is available at a catchment scale (1:100,000) to undertake the assessment of LSC and other soil thematic maps.
- Moderate (2) - Most soil and landscape data is available at a catchment scale (1:100,000 - 1:250,000) to undertake the assessment of LSC and other soil thematic maps.
- Low (3) - Limited soil and landscape data is available at a reconnaissance catchment scale (1:100,000 & 1:250,000) which limits the quality of the assessment of LSC and other soil thematic maps.
- Very low (4) - Very limited soil and landscape data is available at a broad catchment scale (1:250,000 or 1:500,000) and the LSC and other soil thematic maps should be used as a guide only.

Responsible party

Contact position	Data Broker
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Responsible party role	pointOfContact

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Metadata date

2024-02-26T13:04:28.784849

Metadata language