Title

Yarrangobilly Soil and Landscape Assessment

Abstract

This National Parks and Wildlife Service (NPWS) tailored mapping product is the major deliverable of the Yarrangobilly Soil and Land Assessment project, in which the Soil and Landscape Assessment Team of DPIE's Science, Economics and Insights Division was engaged to carry out a soil landscape assessment of the Yarrangobilly section of Kosciuszko National Park. This project was the result of multiple discussions, in particular the Alpine Research Prioritisation, in which baseline soil information was identified as the number two research priority.

This product delivers a consistent and comprehensive layer of soil landscape information and maps of specific soil and land values, limitations and hazards, soil and landscape summary descriptions and related management advice to support effective park management and decision-making.

In addition this product will assist in establishing a soil baseline to measure and predict likely changes in the soil resource into the future.

Online Maps: This area is also covered by the mapping of Hydrogeological landscapes of NSW & ACT 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: Department of Planning, Industry and Environment, 2021, *Yarrangobilly Soil and Landscape Assessment*, NSW Department of Planning, Industry and Environment, Parramatta.

Resource locator

Data Quality Statement

Name: Data Quality Statement

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

Description:

DSQ - Yarrangobilly Soil and Landscape Assessment

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 soil spatial viewer.

Function: download

Yarrangobilly SLA data package

Name: Yarrangobilly SLA data package

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

Description:

Download complete package: GIS shapefile, ESRI Layer files, PDF reports, attribute tables and metadata.

Function: download

Yarrangobilly SLA final report

Name: Yarrangobilly SLA final report

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

Description:

Yarrangobilly Soil and Landscape Assessment final report [PDF]

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	d52e5439-d529-43f0-8628-f3fa7ef782ca

Presentation form	Map digital
Edition	5.0
Dataset language	English

Metadata standard

Name	ISO 19115
Edition	2016
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/d52e5439-d529-43f0-8628-f3fa7ef782ca
Purpose	To support effective national park management and decision-making within the Yarrangobilly region.
Status	Completed

Spatial representation

Type	vector
Geometric Object Type	surface
Geometric Object Count	815

Spatial reference system

Code identifying the spatial reference system	4283
Equivalent scale	1:None

Additional information source	**Spatial GIS shapefile attribute table fieldnames:** • *SL_NSWcode* - Soil landscape code (primary key) • *SL_NSWname* - Soil landscape name (unique) • *WHC_Class* - Soil Water Storage Capacity soil type factor • *WHC_Depth* - Soil Water Storage Capacity soil depth factor • *WHC_N* - Soil Water Storage Capacity rating name • *WHC_Rating* - Soil Water Storage Capacity rating • *RegStab_D* - Soil Regolith Stability (Dominant)

- *RegStab_SD* - Soil Regolith Stability (subdominant)
- *RegStab_Cl* - Soil Regolith Stability classsification
- *RegStab_Ds* - Soil Regolith Stability class description
- *S_crbn_stk* - Soil carbon stock
- *Gen_Fert* - General Fertility
- *S_wtr_stge* - Soil water Storage
- *Habitat_bio* - Habitat/Biodiversity
- *S_bioActvty* - Soil Biological activity
- *GeoHeritge* - Geoheritage
- *Gen_Desc* - General description
- *Field_chkd* - Field checked
- *AsbestosRk* - Asbestos risk
- *BushF_DamR* - Bushfire topsoil damage risk
- *EngineerRk* - Engineering risk
- *Erodibilty* - Erodibility
- *ErodibSoils* - Erodible soils
- *Eros_risk* - Erosion risk
- *Flood_Risk* - Flood risk
- *FragleSoil* - Fragile topsoil
- *GullyErosRk* - Gully erosion risk
- *HardsetSrf* - Hardetting surfaces
- *LowWetBear* - Low wet bearing strength
- *MassMov* - Mass movement risk
- *PeatFireRk* - Peat fire risk
- *PermHghWat* - Permanently high watertables
- *PrDrainge* - Poor drainage
- *PotDischgA* - Potential discharge area
- *RockfallRk* - Rockfall risk
- *RockOutcrp* - Rock outcrop
- *RkOutcpStp* - Rock outcrop (steeper sections)
- *Runon* - Run-on
- *SandySoils* - Sandy soils
- *ShallwSoil* - Shallow soils
- *SheetErsRk* - Sheet erosion risk
- *SinkhleClp* - Sinkhole collapse risk
- *SodctyDisp* - Sodicity/dispersion
- *SoilAcidty* - Soil acidity
- *Sol_ErosRk* - Soil erosion risk
- *SteepSlope* - Steep slopes
- *Stoniness* - Stoniness
- *StrmbkErRk* - Streambank erosion risk
- *StructDecl* - Structure decline
- *Tramplg_Rk* - Trampling risk
- *TrkTrlErsR* - Track and trail erosion risk
- *Waterlog* - Waterlogging

Topic category

Keyword set

keyword value	SOIL SOIL-Erosion VEGETATION FAUNA
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16

Geographic location

West bounding longitude	148.35022
East bounding longitude	148.50057
North bounding latitude	-35.88745
South bounding latitude	-35.53405
NSW Place Name	Yarrangobilly region, NW section Kosciuszko National Park 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	2020-01-01
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
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

This mapping used traditional soil survey techniques, incorporating the interpretation of remotely-sensed imagery (e.g. radiometrics, 5m digital elevation models and ADS40 and SPOT satellite/airborne imagery), Geological Survey of NSW Seamless Geology v.2, State Vegetation Type Mapping (Eastern NSW) v1.1, climatic data and other natural resource spatial datasets.

Soil landscapes were mapped using ESRI ArcMap 10.4 GIS and digitized at a nominal scale of 1:10,000. Draft soil landscape from the Tumut 1:100,000 sheet was incorporated into the linework for north-western section of the project area.

Information from two other existing soil landscape surveys in the area (OBSCRAS – Tantangara and Yarrangobilly and Murrumbidgee Soil Benchmarking Project - Tantangara and Yarrangobilly) were also used in the creation of the mapping product.

Field work was carried out on November and December 2020. Soils were described from road/track batters, pits and augers with 89 additional soil profile descriptions collected during the investigation to support the limited existing information available. Site information was recorded and uploaded through eDIRT into the DPIE's Soil and Landscape Information System (SALIS).

Laboratory analysis, of both chemical and physical properties, was undertaken for many of the soil types identified. However limited access and weather prevented all map units from being visited and sampled for laboratory analysis. Results are viewable on eSPADE.

For each of the 51 soil landscape map units, key values and limitations were described in the report, along with landscape and soil summaries, cross section landscape diagrams and soil profile details. Soil types are described using the Australian Soil Classification (ASC) and Great Soil Group (GSG) classifications.

Limitations on public access

Scope	dataset

DQ Completeness Commission

Effective date	2021-12-22
Explanation	Major soil types are generally described for each soil landscape map unit facet (component). Soil profile descriptions and laboratory analysis were collected for the most representative of these soil types in the unit. In some cases for areas with difficult access, very little to no soil profile descriptions may be available. In the GIS shapefile, all map units are labelled, assigned soil and landscape summaries and have an associated report.

DQ Completeness Omission

Effective date	2021-12-22
Explanation	For each map unit, only the main key limitations/risks were described in the report. The limitations/risks described vary between map units and therefore information gaps in the GIS attribute table naturally occur.

DQ Conceptual Consistency

Effective date	2021-12-22
Explanation	The map and reports have been checked for technical consistency and compliance with soil landscaping standards. Map unit concepts and polygons, major soil types and soil landscape descriptions were checked during fieldwork (where possible). Logical consistency of vector data was assessed at the time of map digitisation.

DQ Topological Consistency

Effective date	2021-12-22
Explanation	ArcGIS was used to remove all topological errors including unwanted gaps and overlapping polygons. A cluster tolerance of 0.000003 decimal degrees (~0.3 m) was set.

DQ Absolute External Positional Accuracy

Effective date	2021-12-22
Explanation	Mapping is published at a scale 1:100,000, however digital captured of map unit linework was collected at a much finer resolution (~1:10,000). Therefore linework has a theoretical accuracy of around 100m on the ground but much better especially for alluvial units. GPS devices with an accuracy of about 4-8 m were used to identify the location of all new soil profiles collected during the project.

DQ Non Quantitative Attribute Correctness

Effective date	2021-12-22
Explanation	Details about how non qualitative attribute data was assessed is provided in final project report. Confidence is greater for this data if field checking and investigations have occurred. Each map unit report, identifies if this process was conducted and is also recorded in the GIS shapefile mapping.

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

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Metadata date

2024-02-26T12:54:22.123885

Metadata language