

Title

Acid Sulfate Soils Risk

Abstract

This project has mapped the occurrence of Acid Sulfate Soils (ASS) along the coast of NSW and provides information that will assist land management and rehabilitation. In their natural state, these soils are submerged but when exposed or drained, they become oxidised and sulphuric acid is produced. This reduces soil fertility, kills vegetation and reduces fish populations. The identification of the location and extent of potential acid sulfate soils (PASS) is the essential first step in managing this problem. 128 map sheets were mapped for risk of occurrence of ASS at a scale of 1:25,000. This project was co-funded by the Natural Resources Audit Council (NRAC), and was revised in 1997.

In this version, (v2.5), ASS risk maps have not been remapped, however minor attribution changes to the GIS linework have occurred to fix errors and some additional original information has been incorporated into the attribute tables. This data provides maps of elevation, landform process groups and landform elements for the mapped area. The symbology for the ASS probability risk map classes can also now be simplified to reflect only probability, potential depth from the surface and presence of areas with Pleistocene sediments or ASS scalding.

Related Datasets: The dataset area is also covered by the mapping of the [Soil and Land Resources of Central and Eastern NSW](#) and [Soil Landscapes of Central and Eastern NSW](#) and [Hydrogeological landscapes of NSW](#).

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: Naylor, SD, Chapman, GA, Atkinson, G, Murphy CL, Tulau MJ, Flewin TC, Milford HB, Morand DT, 1998, *Guidelines for the Use of Acid Sulfate Soil Risk Maps*, 2nd ed., Department of Land and Water Conservation, Sydney.

Resource locator

[Data quality statement](#)

Name: Data quality statement

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

Description:

DQS - Acid Sulfate Risk maps

Function: download

[Show on eSPADE Web Map](#)

Name: Show on eSPADE Web Map

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

Description:

View this dataset on the eSPADE spatial viewer.

Function: download

[Download package](#)

Name: Download package

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

Description:

Download data package: shapefile, PDF Risk maps and guidelines of this product.

Function: download

[Acid Sulfate Soils web page](#)

Name: Acid Sulfate Soils web page

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

Description:

DPE's web page about acid sulfate soils in NSW.

Function: download

[DPE's Land and](#)

Name: DPE's Land and soil website

[soil website](#)

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

Description:

Soil information, mapping & management; land degradation & geodiversity.

Function: download

[ArcGIS REST
Map Services](#)

Name: ArcGIS REST Map Services

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

Description:

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

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

[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

[KML Service](#)

Name: KML Service

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

Description:

Download KML for use in Google Earth.

Function: download

Unique resource identifier

Code 1eb85cf2-ca9d-4170-8ed2-7b54c45e00c2

Presentation form Map digital

Edition 2.5

Dataset language English

Metadata standard

Name ISO 19115

Edition 2016

Dataset URI <https://datasets.seed.nsw.gov.au/dataset/1eb85cf2-ca9d-4170-8ed2-7b54c45e00c2>

Purpose Legislative and Regulatory requirements - identifying areas of potential and known areas of Acid Sulfate Soils along coastal NSW

Status Completed

Spatial representation

Type vector

Spatial reference system

Code identifying the spatial reference system 4283

Equivalent scale 1:None

Additional information source

GIS Field names

TAG - Master ASS code (risk, process, element, additional descriptive information and elevation)

TAG_name - Master ASS name

LF_PROCESS - Landform process name

Proces_Cde - Landform process code

LF_ELEMENT - Landform element name

Elemnt_Cde - Landform element code

ELEVATION - Elevation name using Australian Height Datum (AHD)

Elev_Cde - Elevation code

RISK - Risk/probability of occurrence name (High probability, Low probability, No known occurrence, Disturbed terrain, Beach)

ADDITIONAL - Additional descriptive information (scalds or Pleistocene sediments presence)

Prob_Tag - Probability map code (probability, elevation and additional descriptive information)

Prob_Name - Probability map name (probability, elevation and additional descriptive information)

Legend - Probability map code and name label for legend

Version - Version of dataset

VersDate - Date of version

PLEASE NOTE: This web map services (WMS) has been customised for use at ArcGIS Online/Bing Maps/Google's standard scale levels. It is recommended that this WMS is used at these scale levels for best display of symbology, labelling and the layer's performance. Major scales levels useful for this dataset include: 1:288,895, 1:144,448,1:72,224, 1:36,112,1:18,056, 1:9,028.

Topic category

Keyword set	
keyword value	Soil SOIL-Chemistry
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	149.827341
East bounding longitude	153.635511
North bounding latitude	-37.471307
South bounding latitude	-28.158544
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	1994-01-07
End position	N/A
Dataset reference date	
Resource maintenance	
Maintenance and update frequency	Not planned
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 maps predict the distribution of Acid Sulfate Soils (ASS) based on an assessment of the geomorphic environment. This assessment has involved mapping of the environments in which they are likely to be found, being the coastal lowlands up to approximately 10m AHD and carrying out fieldwork to establish field relationships between landform, elevation and occurrence of ASS. Landform elements were used as the basic mapping unit. These provide a basis for land use planning and allow the application of elevation classes so that the depth of occurrence of ASS within a landform element can be estimated. It allows the prediction of soil management problems in other areas with similar landform and soil characteristics. ASS maps are not intended to provide site specific ASS information. The information derived from the maps cannot be used in the assessment of the potential to effectively manage ASS in a particular development. When using ASS maps, it must always be remembered that there can be expected to be extreme variations in the nature and distribution of ASS and that the depth to the ASS layer can be highly variable. The depths given in the map key should be used as a guide only and not used for a specific assessment of development potential. It is recommended that all land use activities likely to disturb ASS require appropriate soil investigations and a management plan to avoid environmental degradation.

Limitations on public access

Scope	dataset
DQ Completeness Commission	
Effective date	2023-01-10
Explanation	Spatial data capture is complete for the entire dataset . Complete for presentation and usage at 1:25000 only. Additional project attributes are available in the spatial data from version 2.5.
DQ Completeness Omission	
Effective date	2009-01-10
DQ Conceptual Consistency	
Effective date	1900-01-01
Explanation	All lines and polygons are labelled. All duplicates were eliminated, lines do not undershoot or overshoot. Polygons and lines were matched with adjoining map tiles. Topological consistency verification was performed as part of the quality assurance procedures using Genamap software and a series of checking procedures implemented (including visual check against field sheet).
DQ Topological Consistency	
Effective date	1900-01-01
DQ Absolute External Positional Accuracy	
Effective date	1900-01-01
Explanation	ASS maps should be used at the scale at which they were published. Enlarging the maps will produce distortions whereby boundaries will no longer represent map units on the ground. ;\n;\nLandform element boundaries were delineated and published at 1:25000 scale. Boundaries between landform classes that could be delineated reliably were drawn as solid lines and as broken lines where they were diffuse or difficult to identify. Elevation information provided on each landform element is approximate only. ;\n;\nDisturbed terrain was identified by aerial photograph interpretation or from sources such as maps supplied by local councils. There are some areas of disturbed terrain which are not shown on the maps. These are typically associated with urban areas where the development prevented the identification and delineation of the disturbance.
DQ Non Quantitative Attribute Correctness	
Effective date	1900-01-01
Explanation	Mapped codes were checked as part of the GIS capture quality assurance procedures, including a visual check of polygon tags against field sheets following digital capture. Soil samples were taken in the field and analysed in the laboratory. During the field work phase, field meetings were held with ASS surveyors to ensure consistency in site selection strategies, soil profile description methods and soil sampling techniques. Quality control and consistency in the mapping and coding of landform elements were also maintained by field checking by other ASS surveyors in the team and regular meetings to discuss and review the process.;\nAttributes updates for legend August 2005 - a field that reflects the legend description based on 12 groupings, 5 High Risk, 5 Low Risk, disturbed terrain and No Risk.

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 2024-02-26T13:22:33.344558

Metadata language