Title	State Vegetation Type Map: Central Tablelands Region Version 1.0. VIS_ID 4778
Alternative title(s)	CentTableSVM_v1p0_PCT_E_4778

## **Abstract**

This dataset was superseded by the State Vegetation Type Map (<a href="https://datasets.seed.nsw.gov.au/dataset/nsw-state-vegetation-type-map">https://datasets.seed.nsw.gov.au/dataset/nsw-state-vegetation-type-map</a>) on 24.06.2022.

Version 1.0 supersedes the pre-production version (v0.1).

The NSW Office of Environment and Heritage (OEH) is producing a new map of the State's native vegetation. This seamless map of NSW's native vegetation types will enable government, industry and the community to better understand the composition and the relative significance of the native vegetation in their local area.

### The State Vegetation Type Map (SVTM)

(http://www.environment.nsw.gov.au/vegetation/state-vegetation-type-map.htm ) is constructed from the best available imagery, site survey records, and environmental information. Existing vegetation mapping has been integrated in some locations. Each vegetation survey is assigned to a Plant Community Type (PCT) and this is used to create a model of the distribution of each type. Their place in the landscape is then attributed based on the visual interpretation of vegetation structure. The SVTM is designed to be dynamically improved and upgraded as new local information becomes available.

Each quickview map is attributed with a code for all three tiers of the NSW vegetation type classification system: Formations, Classes, and Plant Community Types (PCTs).

The following fields are available for all maps: PCTID: The unique identifier for the Plant Community Type. The PCT Id is captured as part of the mapping program. PCTName: A colloquial description of the plant community that can be understood by non-botanists. It may include common names of dominant plant species, names of a geographical region, a substrate, a soil type or a climatic zone. PCTIDMod1: The most likely Plant Community Type to occur in the polygon, identified by its PCT Id. This value is as derived from a spatial model that may provide one or more PCT alternatives. It provides an indication of PCT uncertainty, as several PCTs will usually have some probability of occurring at any particular location. PCTIDMod2: The second most likely Plant Community Type identifier as derived from a spatial model. PCTIDMod3: The third most likely Plant Community Type identifier as derived from a spatial model. mapSource: The various sources of information used in deriving the vegetation map, including spatial models, visual interpretation and existing map products. vegetationClass: Equivalence of a community to one of the Vegetation Classes as originally defined in the Keith (2004) Statewide Vegetation Map. vegetationFormation: Equivalence of a community to one of the Vegetation Classes as original defined in the Keith (2004) Statewide Vegetation Map. The primary thematic layer in this dataset is a map of regional scale Plant Community Type (PCT).

Quickview maps are simplified versions of the vegetation maps and only contain a subset of the attributes available. They are easier to navigate but still contain the top 3 most likely PCTs for each polygon.

Note that this vector quickview is a dissolved surface and does not highlight the fine internal line-work within each map unit. Please refer to the 100k full data sheets for the complete editable internal linework .

The quickview maps are downloadable (see download package). The full datasets are available as 1:100,000 map tiles, by request from the Data.Broker@environment.nsw.gov.au.

The following fields are also provided in the full vector line work per 100k sheet: vegStruct - Vegetation Structural Class as derived from manual aerial photo interpretation: Note that this surface is independent of PCT and may disagree with PCTID. This is produced entirely by manual aerial photo interpretation of 50cm ADS40 imagery. Possible values are: vegStruct Structural Class 0 Non Native 1 Candidate Grasslands 2 Dry Sclerophyll 3 Wet Sclerophyll 5 Floodplain Forest 7 Non Woody Wetlands 8 Grass Open Woodlands 10 Rainforests 11 Riparian Forests 12 Acacia Woodlands 13 Shrublands 15 Mallee 16 Rocky Outcrops 17 Belah

Note that this vegStruct surface also contains a number of manually attributed PCT's where possible. These PCT's have some spatial representation within this field: 185,186,217,267,268,276,292,317,325,327,329,338,339,351,358,420,476,677,796,800,840,951,963,1094, 1101,1177,1197,1386,1611,1663,1691,1711,1855,1856,1859,1862,1873,1879,1882,1884,1885,1887,1889,1890,1892,1894,1896,1899,1900, 1902,1905,1907,1908,1910 (See PCT Look-up-table in the download package for PCT common names).

reflects the modelling surface (PCTIDMod1 – Note that this reflects the modelling surface (PCTIDMod1) only and may not reflect the confidence of the mapped attribution (PCTID). PCTallocationConfidence can only be accurately applied to the published map surface (PCTID) where mapSource = 'Spatial Modelling'. PCTSiteValidation – Lists the site survey and site number as a concatenation. This corresponds to the point site layer listed under 'Accompanying datasets.

Quickview Catchment Wide Dissolves For rapid visual reference, a 5m rapid-view raster is included in the geodatabase: CentralTablelands\_v1\_0\_PCT\_5m\_E\_4805 Fields: PCTcode, PCTName, vegetationFormation, vegetationClass

VIS\_ID 4778

### Resource locator

Data Quality Statement Name: Data Quality Statement

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

Description:

DQS for vegetation map

Function: download

<u>Download</u> Package Name: Download Package

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

Description:

Data (geodatabase feature class) & documents

Function: download

ArcGIS REST Service Name: ArcGIS REST Service

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

Description:

An ArcGIS Server web service represents a GIS resource—such as a map, locator, or image that is located on an ArcGIS Server site and is made available to client applications. Depending on the layers enabled, this web service allows a user to query its features and/or visualise the dataset. This service is aimed at advanced geographical information users, and will require access to geographical information system (GIS) software such as ArcGIS/ArcMap.

Function: download

# Unique resource identifier

Code a33516a3-f957-4d2f-bf03-536d78bdccb4

Presentation form

mapDigital

Edition 1.0

Dataset language

eng

### Metadata standard

Name ANZLIC Metadata Profile: An Australian/New Zealand Profile of AS/NZS ISO

19115:2005, Geographic information - Metadata

Version 1.1

Dataset URI https://datasets.seed.nsw.gov.au/dataset/a33516a3-f957-4d2f-bf03-536d78bdccb4

Purpose This dataset was developed under the OEH State Vegetation Map project to provide government and community with regional scale information about native vegetation.

Status	onGoing				
Spatial represe	Spatial representation				
Туре	vector				
Spatial reference system					
Authority code	GDA94 Geographic (Lat\Long)				
Code identifying the spatial reference system	4283				
Equivalent scale	1:None				
Additional information source	technical report pen- http://www.environm map-methodology-1	ding. For State Vegetation Type Methodology see: nent.nsw.gov.au/resources/vegetation/nsw-state-vegetation-type- 70134.pdf			
Topic category	,				
Keyword set					
keyword value		BOUNDARIES-Biophysical			
		ECOLOGY-Landscape			
		FLORA-Native VEGETATION			
Originating contro	lled vocabulary	VEGETATION			
Title	ned vocabulary	ANZLIC Search Words			
Reference date		2008-05-16			
Geographic loc	eation				
West bounding lor		148.29018			
East bounding lon	gitude	150.61978			
North bounding la	titude	-34.20593			
South bounding latitude		-32.05809			
NSW Place Name		Central Tablelands			
Vertical extent	information				
Minimum value		-100			
Maximum value		2228			
Coordinate referer	nce system				
Authority code		urn:ogc:def:cs:EPSG::			
Code identifying system	the coordinate reference	5711			
Temporal exte	nt				

Begin position	2017-02-02
End position	N/A
Dataset reference date	
Date type	revision
Effective date	2019-01-05
Resource maintenance	
Maintenance and update frequency	None
Contact info	
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Responsible party role	pointOfContact

### Lineage

A summary of the product's lineage is below. Please refer to pending technical notes for a detailed description of the methodologies and source datasets.

The PCT map was derived primarily using a spatial modeling approach augmented with high resolution aerial imagery (50cm ADS40) for visual interpretation and automated line-work derivation.

In summary, the process for PCT attribution involved the following:

Vegetation Survey and Classification: Existing floristic plot data comprised over 4000 existing sites after data cleaning. To allocate survey sites to PCTs, full floristic plots were analysed using a UPGMA clustering approach in Primer with significant groups identified using SIMPROF and species contributions for each resulting group calculated using SIMPER.

Pattern Derivation: A multi-resolution segmentation algorithm was used to create image objects with low internal variation. Image objects represent patches of vegetation that can later be classified based on attributes such as crown cover, spectral response, or soil type. The segmentation parameters and scale was derived iteratively based on visual inspection. Vegetation recognised in high spatial resolution imagery (ADS40 – 50cm) were used as a reference point. This process provided the line work for subsequent PCT attribution.

Visual attribution of Vegetation Structural Class: The purpose of attributing vegetation structural classes to polygons is to predetermine broad vegetation types for modeling purposes using remote sensing. These classes reduce the PCT options for any one polygon making the modeling more effective in its attribution. A structural class was attributed to every polygon in the study area. Structural classes were assigned by visual inspection referencing ADS40imagery. Every polygon was visually checked by an expert interpreter.

Modeling Envelopes: As a further constraint to modeling outcomes, spatial envelopes were used to constrain PCTs to certain geographic ranges, reducing the amount of types competing within the model at any particular location. The constraints used were applied at different stages in the mapping process. The constraints were derived from particular IBRA (Interim Bioregionalisation of Australia v7; Commonwealth of Australia 2012) subregions, selected based on review of the literature and expert opinion.

Spatial Distribution Modeling of Plant Community Types: Modeling of PCT used Boosted Regression Trees (BRT). A suite of over one hundred candidate environmental predictor variables, including climate, geology, soil, geophysical data, and terrain indices, were compiled for use in the BRT models. A comprehensive list of these predictor variables will be found in the Technical Notes.

Integration of Existing Mapping: Selective Extractions from two existing datasets were spliced into the modelled map surface in some locations. The map units from these pre-existing products have been translated to PCT where appropriate. The field !mapSource! lists which polygon attributions were sourced from these datasets. These datasets are specified below by VIS ID and can be identified using the following queries: o Existing Mapping VIS3863 o Existing Mapping VIS4184

Post modelling: The modelled surface was inspected visually where possible and manually edited in by expert ecologists to address any obvious anomalies due to source data limitations such as a low sample density or course environmental data.

Limitations on public access	
Scope	dataset

Responsible party

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Metadata date 2018-02-01

Metadata language eng