

Title	State Vegetation Type Map: Riverina Region Version v1.2 - VIS_ID 4469
Alternative title(s)	RiverinaSVM_v1p2_PCT_E_4469
Abstract	<p>This dataset was superseded by the State Vegetation Type Map (https://datasets.seed.nsw.gov.au/dataset/nsw-state-vegetation-type-map) on 24.06.2022.</p> <p>Please note, Riverina Region Version v1.2 - VIS_ID 4469 web service and zipped dataset will be archived and will no longer be available on line after 31st March 2025.</p> <p>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.</p> <p>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.</p> <p>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).</p> <p>The following fields are available for all maps:</p> <p>PCTID: The unique identifier for the Plant Community Type. The PCT Id is captured as part of the mapping program.</p> <p>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.</p> <p>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.</p> <p>PCTIDMod2: The second most likely Plant Community Type identifier as derived from a spatial model.</p> <p>PCTIDMod3: The third most likely Plant Community Type identifier as derived from a spatial model.</p> <p>mapSource: The various sources of information used in deriving the vegetation map, including spatial models, visual interpretation and existing map products.</p> <p>vegetationClass: Equivalence of a community to one of the Vegetation Classes as originally defined in the Keith (2004) Statewide Vegetation Map.</p> <p>vegetationFormation: Equivalence of a community to one of the Vegetation Classes as original defined in the Keith (2004) Statewide Vegetation Map.</p> <p>USER ACCURACY of Plant Community Type Models:</p> <p>These results should be interpreted as a reflection of the model user accuracy, not map accuracy. [Map Accuracy = API Accuracy (visual interpretation of ADS40) x Model Accuracy (PCT Model Results)]. The accuracy of the API produced landscape class map has not been assessed at this stage. The model user accuracy</p>

below was derived by cross validation for CWL and RIV and by an 80/20 split for BRGN. User accuracy using cross validation is an estimate of how well the model would perform on a new, unmapped location. PCT User Accuracy is represented as a % (percentage). The number of field survey samples is recorded in the field Number of sites per PCT. The summary table below shows the number of PCTs modelled in each study area and the number of sites available (RIV includes pseudo-sites). PCT User Accuracy is weighted by the Number of sites per PCT. Accuracy is not reported for PCTs with less than 5 records. **For a full description per PCT of user accuracy, please see attached 'User_Accuracy_per_PCT_VIS_ID_4469.pdf' located below under 'Data and Resources'.**

Table 1: SVTM Number of PCTs, number of sites per PCT and PCT User Accuracy (weighted by number of sites)

:Area::: Number of PCTs Number of Sites PCT user accuracy weighted by number of sites			
+-----+-----+-----+-----+ -----+			
:NBRG*	268:::	2534:::	
54.9:::			
+-----+-----+-----+-----+ -----+			
:CWL**	198:::	10463:::	
62.2:::			
+-----+-----+-----+-----+ -----+			
:RIV:::	130:::	10699:::	
57.5:::			
+-----+-----+-----+-----+ -----+			
:Total:::	596:::	23696:::	
58.2:::			

Results based on 80/20 Cal/Val split*

Cross validation results**

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.

The quickview maps are available by request from the Data.Broker@environment.nsw.gov.au. The full datasets are available as 1:100,000 map tiles, also by request from the Data.Broker@environment.nsw.gov.au.

A technical report is in press: State of New South Wales and Office of Environment and Heritage (2016) NSW State Vegetation Type Map – Central NSW, Part A: Summary, NSW Office of Environment and Heritage, Sydney, Australia. Meanwhile, for more technical detail about how the maps are created, or more detailed data, contact Bionet@environment.nsw.gov.au or visit <http://www.environment.nsw.gov.au/vegetation/state-vegetation-type-map.htm>. VIS_ID 4469

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

Data Quality Statement - Riverina/Murray VIS ID 4469	<p>Function: download</p> <p>Name: Data Quality Statement - Riverina/Murray VIS ID 4469</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>DQS - Riverina/Murray SVM VIS ID 4469</p> <p>Function: download</p>
User Accuracy per PCT VIS ID 4469	<p>Name: User_Accuracy_per_PCT_VIS_ID_4469</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>User Accuracy Per PCT for SVTM:Riverina:VIS4469</p> <p>Function: download</p>
Technical Report	<p>Name: Technical Report</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Download Technical Report</p> <p>Function: download</p>
KMZ	<p>Name: KMZ</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Connect to KML service (view in Google Earth)</p> <p>Function: download</p>
WMS	<p>Name: WMS</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Web Map Service (WMS). Connect to WMS for SVTM quickview 5 metre derived grid.</p> <p>Function: download</p>
ArcGIS REST Service	<p>Name: ArcGIS REST Service</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>ArcGIS REST Services Directory – provides a variety of interfaces for web browsers, GIS users and developers, to view quickview maps (5 metre-derived grid).</p> <p>Function: download</p>
Download Package	<p>Name: Download Package</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Download Spatial (Esri Geodatabase) Data and reports</p> <p>Function: download</p>
Unique resource identifier	
Code	94e33b53-b923-4e0a-9b7b-e6145576be74
Map digital	

Presentation form	
Edition	1
Dataset language	English
Metadata standard	
Name	ISO 19115
Edition	2016
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/94e33b53-b923-4e0a-9b7b-e6145576be74
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	On going
Spatial representation	
Type	vector
Geometric Object Type	curve
Spatial reference system	
Code identifying the spatial reference system	4283
Spatial resolution	0 m
Additional information source	technical report in preparation.
Topic category	

Keyword set	
keyword value	FLORA-Native ECOLOGY-Community
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	143.305664
East bounding longitude	148.776855
North bounding latitude	-36.832854
South bounding latitude	-33.949557
NSW Place Name	Riverina
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	2016-01-01
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	A summary of the product's lineage is below.	
	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 3700 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. Segmentation was performed using ADS40 where available, SPOT 5 imagery. 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.	
Limitations on public access	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: 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 CentralSouthernNSW_ADS40_E_3884 (!mapSource! = 'E3884') o CRA_Tumut_Floristics_E_4141 (!mapSource! = 'E4141')	
	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.	
	Scope	dataset
	DQ Completeness Commission	
	Explanation	complete
	DQ Completeness Omission	
	Explanation	complete
DQ Topological Consistency		
	Explanation	geometrically & topologically correct
DQ Absolute External Positional Accuracy		
	Explanation	Recommended Highest resolution is 1:25000

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	
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 date	2024-10-09T02:15:14.850516
Metadata language	