Title	State Vegetation Type Map: Border Rivers Gwydir / Namoi Region Version 2.0 VIS_ID 4467
Alternative title(s)	BRG_NamoiSVM_v2p0_PCT_E_4467
Abstract	This dataset was superseded by the State Vegetation Type Map (https://datasets.seed.nsw.gov.au/dataset/nsw-state-vegetation-type-map) on 24.06.2022. 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. USER ACCURACY of Plant Community Type Models: 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 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_4467.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.

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 4467

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 - Border Rivers Gwydir Namoi VIS ID 4467

Name: Data Quality Statement - Border Rivers Gwydir Namoi VIS ID 4467

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

Description:

	DQS - Border Rivers Gwydir Namoi SVM VIS ID 4467 Function: download
User_Accuracy_per_PCT_VIS_ID_4467	Name: User_Accuracy_per_PCT_VIS_ID_4467 Protocol: WWW:DOWNLOAD-1.0-http--download Description: User Accuracy Per PCT for SVTM:Border Rivers / Gwydir:VIS4467 Function: download
Download Package	Name: Download Package Protocol: WWW:DOWNLOAD-1.0-http--download Description: Data (Geodatabase and TIF) Function: download
Unique resource identifier	
Code	45009ca5-4697-4a7f-acb6-0e83d88ca7af
Presentation form	Map digital
Edition	2.0
Dataset language	English
Metadata standard	
Name	ISO 19115
Edition	2016
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/45009ca5-4697-4a7f-acb6-0e83d88ca7af
Purpose	This dataset was developed as part of the OEH State Vegetation Map to provide government and community with regional -scale information about native vegetation.
Status	Completed
Spatial representation	
Type	vector
Geometric Object Type	complex
Geometric Object Count	1
Spatial reference system	
Code identifying the spatial reference system	4283
Equivalent scale	1:None
Additional information source	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:
Topic category	

Keyword set

keyword value	BRGN
	PCT
	Plant Community Types
	Regional Scale Vegetation Mapping
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16

Geographic location

West bounding longitude	147.39402
East bounding longitude	152.11903
North bounding latitude	-31.85658
South bounding latitude	-28.53715
NSW Place Name	Central West Lachlan

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	2014-01-01
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

A summary of the product's lineage is below. Please refer to the Technical Report (in press) 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 9054 existing sites after data cleaning. A large number of gaps in existing survey coverage were evident and required further survey information. Stratification based on archive broad vegetation type mapping (Regional Vegetation Types; Eco Logical Australia 2008b) and gap analysis was undertaken to select locations for additional plot data collection. A total of 6013 additional rapid data points were collected. 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. The existing plot data were allocated across 258 PCTs.

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 patterns from existing stereoscopic aerial photo interpretation and those recognised in high spatial resolution imagery (ADS40) were used as a reference point. Segmentation was performed using ADS40, SPOT 5 and SRTM derived topographic indices. this process provided the line work for subsequent PCT attribution.

Visual attribution of Landscape Class: The purpose of attributing Landscape classes to polygons is to predetermine broad vegetation types for modelling purposes using remote sensing. These classes reduce the PCT options for any one polygon making the modeling more effective in its attribution with commensurate less computing effort/time. A landscape class was attributed to every polygon in the study area. Landscape classes were aided by reference to existing mapping. Corrections were made based on ADS40 with on-screen attribution. Every polygon was visually checked by an expert interpreter.

Modelling Envelopes: As a further constraint to modelling outcomes, spatial envelopes were used to constrain PCTs to a certain geographic range, 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 Keith Class (Keith 2004) models were constrained to particular IBRA (Interim Bioregionalisation of Australia v7; Commonwealth of Australia 2012) subregions, selected based on review of the literature and expert opinion. The type models were constrained to particular ranges of a topographic position index, again based on literature review and expert opinion. Not all types were constrained by topographic envelopes, as some were considered to be less correlated with particular topographic positions.

Spatial Distribution Modelling of Keith Classes and Plant Community Types. Modelling of Keith Class and PCT used a combination (ensemble) of Generalised Dissimilarity Model (GDM), Boosted Regression Trees (BRT), and a simple Nearest Neighbour model. A suite of candidate environmental predictor variables, including climate, geology, soil, geophysical data, and terrain indices, were compiled for use in the GDM and BRT models. A comprehensive list of these predictor variables can be found in the Technical Notes v1.0.

Uplifted API and Expert Editing: Vegetation communities from the Gwydir Wetlands and Floodplain Vegetation Map 2008 (Bowen & Simpson 2010) were spatially translated into the current line-work via a majority extent per polygon algorithm. The vegetation community mapping resulting from the aforementioned procedures was extensively edited on screen to correct attribution where there may have been for example existing API, missed vegetation, ecological anomalies, incorrect assignments, modelling noise and inclusion of late site data. The extent of each attribution source is delineated by the Map Source data layer provided in this dataset.

For further details on methodology and validation please refer to the report (in prep). Reference: 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.

Limitations on public access

Scope	dataset

DQ Conceptual Consistency

Effective date	1901-01-01

DQ Topological Consistency

Effective date	1901-01-01
Explanation	Geometrically & topologically correct.

DQ Absolute External Positional Accuracy

Effective date	1901-01-01

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

2024-08-28T02:03:19.385850

Metadata language