

Title	Wingecarribee Fine-scale Native Vegetation (PCT) Map Version v2.1 (SVTM). VIS_ID 4670
Alternative title(s)	WingecarribeeSVM_v2p1_PCT_E_4670
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This dataset was superseded by the State Vegetation Type Map (https://datasets.seed.nsw.gov.au/dataset/nsw-state-vegetation-type-map) on 24.06.2022.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>This local scale Plant Community Type map was developed in collaboration with the NSW State Vegetation Type Mapping (SVTM) program.</p> <p>Version 2.0 of this data underwent internal review during May and June 2017. This version (v2.1) was initially open for review until 1st week of October, 2017. With the review period closed, v2.1 will be revised for a public release of Version 3.0 in 2019. Version 3.0 will be generated using a completely revised coastal-wide PCT classification.</p> <p>Please note that only footprints for v2.1 are available for download. Access enquiries on the Wingecarribee PCT maps are detailed in document Wingecarribee_v2.0_metadata.pdf (part of download package).</p> <p>The primary thematic layer in this dataset is a map of fine-scale scale Plant Community Type (PCT). The full dataset is delivered as 100k sheets. For related TEC mapping, see VIS_ID 4676 & 4677 available here: https://datasets.seed.nsw.gov.au/dataset/wingecarribee-fine-scale-native-vegetation-map-version-v2-0-tecs-vis-id-4676-4677</p> <p>VIS_ID 4670</p>
Resource locator	
Data Quality Statement	<p>Name: Data Quality Statement</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>DQS for Wingecarribee Quickview map</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>Data (footprints) and documents</p> <p>Function: download</p>
Unique resource identifier	
Code	92abe576-9763-4ad7-a69f-317f9e9da6df
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/92abe576-9763-4ad7-a69f-317f9e9da6df
Purpose	For rapid visual reference of PCT mapping for Wingecarribee. This dataset was developed under the OEH WINGECARRIBEE VEGETATION MAPPING AND GREEN WEB CORRIDOR PROPOSAL- JUNE 2015.
Status	On going
Spatial representation	
Type	vector
Geometric Object Type	curve
Spatial reference system	
Code identifying the spatial reference system	4283
Equivalent scale	1:None
Additional information source	see Wingecarribee_v2.0_metadata.pdf for further details. Footprints supplied only. Please refer to metadata document for access queries.
Topic category	

Keyword set	
keyword value	BOUNDARIES-Biophysical ECOLOGY-Landscape FLORA-Native VEGETATION
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	149.96404
East bounding longitude	150.74568
North bounding latitude	-34.76932
South bounding latitude	-34.21258
NSW Place Name	Wingecarribee
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	2017-05-25
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. This may change after product review. Please refer to project documentation 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 ADS80 and 40) for visual interpretation and automated line-work derivation.

In summary the process for PCT attribution involved the following:

Vegetation Survey and Classification: Classification was carried out on full floristic survey plot data stored within VIS-FS. Classifiable plots located within Wingecarribee LGA, or within a 10km buffer of the LGA boundary totaled 1847 sites. Plots included cover-abundance and presence-only data types that were analyzed separately. The cover-abundance analysis set included 2 methods of analysis: 1) PATN (Belbin, 1988) using the non-hierarchical clustering routine ALOC and the Bray-Curtis association measure; and 2) analysis in R 3.1.1 using the Noise Clustering functions in the 'vegclust' package (De Cáceres, Font, & Oliva, 2010; Wiser & De Cáceres, 2013). Analysis was conducted on a distance matrix of Bray-Curtis dissimilarity values. Presence-only data were analysed using the ALOC routine in PATN, using the Czekanowski association measure. The outputs of ALOC and vegclust analyses were examined in detail. The 2 sets of results - closest group centroids according to the different clustering methods - were combined in a single table and plots were assigned, generally, to the closest group centroid.

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 (ADS80 & 40 - 50cm) were used as a reference point. Segmentation was performed using ADS40 at sc30 resolution. 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 ADS80 & 40 imagery. Polygons were visually checked by an expert interpreter, and an analysis of mismatch between structure class and vegetation survey plot data was used to detect, and where appropriate, correct the structure layer or errors in the plot data such as incorrect GPS co-ordinates.

Modeling Envelopes: As a further constraint to modeling outcomes (i.e. applied post-modelling), environmental spatial envelopes were used to constrain PCTs to certain geographic ranges, reducing the amount of types competing within the model at any particular location. Constraints were derived individually for each PCT and could comprise one or many of the following parameters: annual precipitation, elevation, geology, lithology, exposure, cold air drainage, distance to drainage, topography and sub-catchment boundaries. Envelopes were initially derived from those for the related SCIVI map units (translated to PCT) per Tozer et al. (2010). These were refined and updated from post-SCIVI plots allocated to each PCT.

Spatial Distribution Modeling of Plant Community Types: Modeling of PCTs used Boosted Regression Trees (BRT). A suite of candidate environmental predictor variables, including climate, geology, lithology, soil, geophysical, terrain indices (derived from 10m DEM), multi-temporal SPOT 5 reflectance values, and Sentinel 2 texture indices were compiled for use in the BRT models.

Post-modeling: The modeled surface was inspected visually where possible, and manually edited by an expert ecologist to address any obvious anomalies due to source data limitations such as a low sample density or coarse environmental data.

Limitations on public access

Scope dataset

DQ Topological Consistency

Explanation geometrically & topologically correct

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 2024-02-26T13:15:13.078090

Metadata language