Title	Wingecarribee Fine-scale Native Vegetation Map (TECs) Version v2.1. VIS_ID 4676 & 4677
Alternative title(s)	WingecarribeeSVM_v2_TEC_E_4676; WingecarribeeSVM_v2_TECex_E_4677
Abstract	The Wingecarribee Shire LGA Vegetation Mapping Project, a collaboration between the Council and the OEH State Vegetation Mapping Program, has produced three vegetation map products. These include the primary thematic layer in this dataset, which is a map of fine-scale scale Plant Community Type (PCT) (see VIS_ID 4670 https://datasets.seed.nsw.gov.au/dataset/wingecarribee-fine-scale-native-vegetation-map-version-v2-0-vis-id-4670), and two TEC layers described here in this metadata statement
	Version 2.0 of all three datasets underwent internal review during May and June 2017. Although the review has been completed, this version (2.1) is currently unavailable until the State Vegetation Type Map for coastal NSW is complete, due June 2019.
	These TEC surfaces are derived from the PCT mapping combined with expert rules that interpret the legal / ecological / geographical descriptions (Final Determinations and Listing/Conservation Advices). The ecological rules can be obtained upon request. These feature datsets include feature classes of the candidate extent of select TEC's.
	The TEC_Ext surfaces are more extended surfaces than the standard TEC boundaries and are derived from the presence of relevant PCT's occurring in the PCTID map surface as well as PCT's occurring in the EnvPCT2 and EnvPCT3 fields (where modelled probability > 0.3). The EnvPCT2 and EnvPCT3 fields indicate the 2nd and 3rd mostly likely PCT in a polygon respectively according to the modelling. VIS_ID 4676; VIS_ID 4677

Resource locator

Data Quality Statement	Name: Data Quality Statement
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	DQS for Wingecarribee TECs
	Function: download
Download package	Name: Download package
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	Data (footprints) & documentation
	Function: download

Unique resource identifier

Code	e7c916d4-bd21-488a-a212-112478cad1a7

Presentation form	Map digital

Edition	2.0

Dataset language	English

Metadata standard

Name	ISO 19115
Edition	2016

Dataset URI	
Purpose	For rapid visual reference of TEC 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
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	149.96434
East bounding longitude	150.72342
North bounding latitude	-34.75119
South bounding latitude	-34.21312
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
2024-02-26T15:38:49.072755

Metadata language