

|  |  |
|--|--|
| <b>Title</b>                           | Wingecarribee Fine-scale Native Vegetation (PCT) Map Version v2.1 (SVTM). VIS_ID 4670  |
| <b>Alternative title(s)</b>            | WingecarribeeSVM_v2p1_PCT_E_4670   |
| <b>Abstract</b>                        | <p>This dataset was superseded by the State Vegetation Type Map (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.</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 <a href="#">Wingecarribee_v2.0_metadata.pdf</a> (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 &amp; 4677 available here: <a href="https://datasets.seed.nsw.gov.au/dataset/wingecarribee-fine-scale-native-vegetation-map-version-v2-0-tecs-vis-id-4676-4677">https://datasets.seed.nsw.gov.au/dataset/wingecarribee-fine-scale-native-vegetation-map-version-v2-0-tecs-vis-id-4676-4677</a></p> <p>VIS_ID 4670</p> |
| <b>Resource locator</b>                |  |
| <a href="#">Data Quality Statement</a> | <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>  |
| <a href="#">Download package</a>       | <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>  |
| <b>Unique resource identifier</b>      |  |
| <b>Code</b>                            | 92abe576-9763-4ad7-a69f-317f9e9da6df   |
| <b>Presentation form</b>               | Map digital  |
| <b>Edition</b>                         | 2.0  |
| <b>Dataset language</b>                | English  |
| <b>Metadata standard</b>               |  |
| <b>Name</b>                            | ISO 19115  |
| <b>Edition</b>                         | 2016   |

|   |  |
|---|--|
| <b>Dataset URI</b>                            | <a href="https://datasets.seed.nsw.gov.au/dataset/92abe576-9763-4ad7-a69f-317f9e9da6df">https://datasets.seed.nsw.gov.au/dataset/92abe576-9763-4ad7-a69f-317f9e9da6df</a>          |
| <b>Purpose</b>                                | 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. |
| <b>Status</b>                                 | On going   |
| <b>Spatial representation</b>                 |  |
| Type  | vector   |
| Geometric Object Type                         | curve  |
| <b>Spatial reference system</b>               |  |
| Code identifying the spatial reference system | 4283   |
| <b>Equivalent scale</b>                       | 1:None   |
| <b>Additional information source</b>          | see Wingecarribee_v2.0_metadata.pdf for further details.<br>Footprints supplied only. Please refer to metadata document for access queries.  |
| <b>Topic category</b>                         |  |

|  |   |
|--|---|
| <b>Keyword set</b>                               |   |
| keyword value                                    | BOUNDARIES-Biophysical<br>ECOLOGY-Landscape<br>FLORA-Native<br>VEGETATION   |
| <b>Originating controlled vocabulary</b>         |   |
| Title  | ANZLIC Search Words   |
| Reference date                                   | 2008-05-16  |
| <b>Geographic location</b>                       |   |
| West bounding longitude                          | 149.96404   |
| East bounding longitude                          | 150.74568   |
| North bounding latitude                          | -34.76932   |
| South bounding latitude                          | -34.21258   |
| NSW Place Name                                   | Wingecarribee   |
| <b>Vertical extent information</b>               |   |
| Minimum value                                    | -100  |
| Maximum value                                    | 2228  |
| <b>Coordinate reference system</b>               |   |
| Authority code                                   | urn:ogc:def:cs:EPSG::   |
| Code identifying the coordinate reference system | 5711  |
| <b>Temporal extent</b>                           |   |
| Begin position                                   | 2017-05-25  |
| End position                                     | N/A   |
| <b>Dataset reference date</b>                    |   |
| <b>Resource maintenance</b>                      |   |
| Maintenance and update frequency                 | As needed   |
| <b>Contact info</b>                              |   |
| Contact position                                 | Data Broker   |
| Organisation name                                | NSW Department of Climate Change, Energy, the Environment and Water   |
| Telephone number                                 | 131555  |
| Email address                                    | <a href="mailto:data.broker@environment.nsw.gov.au">data.broker@environment.nsw.gov.au</a>                                  |
| Web address                                      | <a href="https://www.nsw.gov.au/departments-and-agencies/dcceew">https://www.nsw.gov.au/departments-and-agencies/dcceew</a> |
| 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          | <a href="mailto:data.broker@environment.nsw.gov.au">data.broker@environment.nsw.gov.au</a>                                  |
| Web address            | <a href="https://www.nsw.gov.au/departments-and-agencies/dcceew">https://www.nsw.gov.au/departments-and-agencies/dcceew</a> |
| 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          | <a href="mailto:data.broker@environment.nsw.gov.au">data.broker@environment.nsw.gov.au</a>                                  |
| Web address            | <a href="https://www.nsw.gov.au/departments-and-agencies/dcceew">https://www.nsw.gov.au/departments-and-agencies/dcceew</a> |
| Responsible party role | pointOfContact  |

**Metadata date** 2024-02-26T13:15:13.078090

**Metadata language**