Title	State Vegetation Type Map: Upper Hunter v1.0. VIS_ID 4894
Alternative title(s)	HunterUpperSVM_v1_0_PCT_E_4894

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This dataset was superseded by the State Vegetation Type Map (https://datasets.seed.nsw.gov.au/dataset/nsw-state-vegetation-type-map) on 24.06.2022.

Please note, Upper Hunter v1.0. VIS_ID 4894 web service and zipped dataset will be archived and will no longer be available on line after 31st March 2025.

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.

The primary thematic layer in this dataset is a regional scale map of Plant Community Type (PCT) - "quickview" map.

Where spatially coincident, this map of Upper Hunter (v1.0) supersedes the Greater Hunter Native Vegetation Mapping v4.0. VIS ID 3855 and was generated sourcing the following improvements:

- A comprehensive revision of vegetation plot allocation to Plant Community Types (PCT), superseding GHM v4 Map Units.
- Addition of 463 vegetation plots.
- Comprehensive revision of aerial photo interpretation of Vegetation Photo Patterns (VPP) at 1:10,000. A relevant selection of PCT's were nested and modelled within each VPP.
- Utilisation of Boosted Regression Tree modelling in place of Generalised Dissimilarity Modelling
- All manual aerial photo interpretation of VPP's modelled PCT's performed using high resolution 50cm ADS-40 aerial imagery in place of SPOT-5 2.5m imagery.
- Semi-automated line work generated using high resolution 50cm ADS-40 aerial imagery in place of SPOT-5 2.5m imagery.
- Climatic and topographic rule based envelopes were generated to constrain the maximum spatial envelope for each PCT. Each envelope was further manually edited.
- Dry Sclerophyll communities further constrained by exposure and landform envelopes.
- Selective integration of the following pre-existing maps to PCT: VIS1849, VIS3863, VIS3913, VIS4184, VIS4778
- 312 vegetation communities mapped as PCT's compared to 185 GHMv4 map units over this region.

QuickView map fields:

- PCTID – Plant Community Type identifier.
- PCTName – Plant Community Type common names
- vegClass – The PCT's Keith Class
- vegFormation – The PCT's Keith Formation
- mapSource - The source of the polygon's PCT attribution.
- MapName – The 100k sheet map name

Note that this is a dissolved surface and does not highlight the fine internal line-work within each map unit. Please refer to the 100k full data sheets for the complete editable internal linework, which are available by request to Data.Broker@environment.nsw.gov.au.

The data are provided in an ArcGIS 10.4 compatible file geodatabase.

Fields in the undissolved 100k sheet fine scale linework:

- polygonID – Unique map polygon identifier
- PCTID – Plant Community Type identifier
- PCTName – Plant Community Type common name
- vegetationClass – The PCT's Keith Class
- vegetationFormation – The PCT's Keith Formation

- mapSource - The source of the polygon's PCT attribution. Possible values are:

    - Manual editing
    - Site Survey
    - Spatial Modelling
    - Pre-existing mapping: VIS1849
    - Pre-existing mapping: VIS3863
    - Pre-existing mapping: VIS3913
    - Pre-existing mapping: VIS4184
    - Pre-existing mapping: VIS4778
    - Expert Rules (see note on grassland attribution below)

- PCTIDMod1 - The most likely Plant Community Type identifier as derived from the spatial model.

- PCTIDMod2 - The second most likely Plant Community Type identifier as derived from the spatial model.
- PCTIDMod3 - The third most likely Plant Community Type identifier as derived from the spatial model.
- vegStruct - Vegetation Photo Pattern (VPP) as derived from manual aerial photo interpretation of 50cm ADS40 imagery.

Possible values for vegStruct include direct attribution of some PCT's where possible in addition to these Vegetation Photo Patterns listed below:

- vegStruct (VPP) Description

    - 0 Non Native
    - 1 Candidate Grasslands
    - 2 Dry Sclerophyll
    - 3 Wet Sclerophyll
    - 5 Floodplain Forest
    - 7 Non Woody Wetlands
    - 8 Grass Open Woodlands
    - 10 Rainforests
    - 11 Riparian Forests
    - 12 Acacia Woodlands
    - 13 Shrublands
    - 15 Mallee
    - 16 Rocky Outcrops
    - 17 Belah
    - 100 Dry Rainforest

- PCTmapAccuracyConfidence - Modelling Confidence for PCTIDMod1 – Note that this reflects the modelling surface (PCTIDMod1) only and may not reflect the confidence of the mapped attribution (PCTID). PCTallocationConfidence can only be accurately applied to the published map surface (PCTID) where mapSource = 'Spatial Modelling'.

- PCTSiteValidation - Type of field validation used to assess PCT reliability: Possible Values are:

    - Not validated
    - RPD (Rapid)
    - Full floristic validation
    - Unknown

Full details will be provided in the pending Technical Report.

VIS_ID 4893

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

Name: Data Quality Statement

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

Description:

	Data quality statement for State Vegetation Type Map: Upper Hunter v1.0. VIS_ID 4894 Function: download
Download package	Name: Download package Protocol: WWW:DOWNLOAD-1.0-http--download Description: Data (geodatabase feature class - quickview map) & documents Function: download
REST Service	Name: REST Service Protocol: WWW:DOWNLOAD-1.0-http--download Description: ESRI REST Services directory Function: download

Unique resource identifier

Code	051fc57d-29b0-4add-9ba4-f476ea3b275a

Presentation form	Map digital
Edition	1.0
Dataset language	English

Metadata standard

Name	ISO 19115
Edition	2016
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/051fc57d-29b0-4add-9ba4-f476ea3b275a
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	Completed

Spatial representation

Type	vector

Spatial reference system

Code identifying the spatial reference system	4283

Equivalent scale	1:None
Additional information source	Technical report pending

Topic category	
Keyword set	
keyword value	BOUNDARIES-Biophysical ECOLOGY-Landscape
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	149.66891
East bounding longitude	152.5
North bounding latitude	-33.07202
South bounding latitude	-31.26375
NSW Place Name	Upper Hunter
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	2018-01-01
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. Please refer to pending technical notes 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 over 4000 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. This process provided the line work for subsequent PCT attribution. Visual attribution of Vegetation Photo Pattern (VPP): The purpose of attributing VPP's 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. Further topographic envelopes were also applied constraining some PCT's to specific landforms. 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: Selective 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 on SEED using the following queries: o VIS1849 o VIS3863 o VIS3913 o VIS4184 o VIS4778 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. Some rules were also applied for grassland extents. These included: PCT 484 and PCT 796 where modelled except where the following spatial rules apply, • PCT 796: All other polygons of candidate Native Grasslands below 200m contour. • PCT 800: All other candidate Native Grasslands on the Merriwa basalt plateau. • PCT 805: All other candidate Native Grasslands above 700m
Limitations on public access	
Scope	dataset
DQ Completeness Commission	
Explanation	complete
DQ Completeness Omission	
Explanation	complete
DQ Topological Consistency	
Explanation	geometrically and 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

2024-10-09T02:14:42.798490

Metadata language