Title	State Vegetation Type Map: Western Region v1.0. VIS_ID 4492
Alternative title(s)	WesternSVM_v1_0_PCT_E_4492

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This dataset was superseded by the State Vegetation Type Map (https://datasets.seed.nsw.gov.au/dataset/nsw-state-vegetation-type-map) on 24.06.2022.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

The primary thematic layer in this dataset is a regional scale map of Plant Community Type (PCT) - "quickview" map. This Version 1.0 release is comprehensive revision of the interim version 0.1 released in 2016.

A summary of the revisions are listed below:

- An established one-to-one relationship between PCT and Vegetation Photo Pattern (vegStruct)
- Integration of existing mapping, including:
    - VIS_ID 4186 - Survey and mapping of Darling floodplain vegetation communities in 2014
    - Balonne mapping 2016 (VIS_ID 4453)
    - Darling mapping 2016 (VIS_ID 4454
- Manual revision of Vegetation Photo Pattern (VPP's, vegStruct) with Aerial Photo Interpretation of time series enhanced time-series 2.5m SPOT 5 imagery
- Reprojection of PCT models across updated VPP's.
- Manual revisions of individual PCT's with Aerial Photo Interpretation of time series enhanced time-series 2.5m SPOT 5 imagery
- Addition of the following PCT's:
    - 5: River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes sub-region of the NSW South Western Slopes Bioregion and the eastern Riverina Bioregion
    - 8: River Red Gum - Warrego Grass - Couch Grass riparian tall woodland wetland of the semi-arid (warm) climate zone (Riverina Bioregion and Murray Darling Depression Bioregion)
    - 21: Slender Cypress Pine - Sugarwood - Western Rosewood open woodland on sandy rises mainly in the Riverina Bioregion and Murray Darling Depression Bioregion
    - 44: Forb-rich Speargrass - Windmill Grass - White Top grassland of the Riverina Bioregion
    - 82: Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion
    - 130: Horse Mulga - Umbrella Mulga shrubland on ranges in the arid and semi-arid climate zones
    - 133: Western Bloodwood - Whitewood low open woodland on Tibooburra Granite
    - 135: Coobah - Western Rosewood low open tall shrubland or woodland mainly on outwash areas in the Brigalow Belt South Bioregion
    - 140: Broombush shrubland in dunefields of the arid climate zone
    - 151: Sandhill Cane Grass hummock grassland on siliceous sands on dune crests of the arid zone
    - 167: Kerosene Grass - Mulka grass - short grassland/forbland of the arid zone
    - 176: Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
    - 181: Common Reed - Bushy Groundsel aquatic tall reedland grassland wetland of inland river systems
    - 189: Ephemeral forbland wetland of low-saline lake-beds of the arid and semi-arid (warm) climate zones *190: Mallee Box open woodland mainly in the Murray Darling Depression Bioregion
    - 196: Australian Boxthorn open shrubland in the semi-arid or arid climate zones
    - 200: River Red Gum woodland wetland of lake fringes in the semi-arid (hot) and arid climate zones

    - 205: Marsh Club-rush wetland very tall sedgeland of inland watercourses, mainly Darling Riverine Plains Bioregion
    - 206: Dirty Gum - White Cypress Pine tall woodland of alluvial sand (sand monkeys) in the Darling Riverine Plains Bioregion and Brigalow Belt South Bioregion
    - 208: River Red Gum low woodland of rocky gorges and creeks in the Cobar Peneplain
    - 220: Purple Wood (Dead Finish) wattle shrubland of the arid zone sandplains
    - 222: Low Bluebush - Bladder Saltbush open shrubland of the arid zone
    - 231: Coolabah open woodland wetland dunefield depressions of the arid zone
    - 240: River Coobah tall shrubland wetland of the floodplains in the Riverina Bioregion and Murray Darling Depression Bioregion
    - 242: Rats Tail Couch sod grassland wetland of inland floodplains
    - 250: Derived tussock grassland of the central western plains and lower slopes of NSW
    - 261: Swamp Paper-bark shrubland wetland ringing depressions in the Mulga Lands Bioregion
    - 264: Supplejack woodland of the NSW north-western semi-arid plains
    - 359: Porcupine Grass - Red Mallee - Gum Coolabah hummock grassland / low sparse woodland on metamorphic ranges on the Barrier Range, Broken Hill Complex Bioregion
    - 375: Budda Pea - Channel Millet ephemeral reedland wetland on floodplains in north-western NSW
    - 630: Black Box - Silver Saltbush chenopod open woodland on terrace rises on alluvial plains in the lower Darling River and lower Murray River region of the Murray Darling Depression Bioregion
    - 1203: Speargrass natural grassland of the sandplains of the Murray Darling Bioregion

---

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, available by request from the Data.Broker@environment.nsw.gov.au.

The 100K full data fields are shown below:

- polygonID – Unique map polygon identifier
- PCTID – Plant Community Type identifier.
- PCTName – Plant Community Type common names
- 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 (Aerial Photo Interpretation)
    - Expert rules and manual edits
    - Spatial Modelling
    - Darling_vegetation_20160120
    - Balonne_vegetation_20160113
    - Existing Mapping VIS4186
    - Site Survey (a site survey exists)

- 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 Structural Class as derived from initial manual aerial photo interpretation. These values may have been changed during later PCT manual editing to maintain the one-to-one relationship between PCT and Vegetation Structural Class.

Possible values for vegStruct are listed in the table below:

- vegStruct (VPP) Description:

- 0 Unknown
- 1 Candidate Grasslands
- 2 Eucalyptus woodlands
- 3 Casuarina woodlands
- 4 Cypress Pine woodlands
- 5 Floodplain forest
- 6 Non woody wetlands
- 7 Brigalow
- 8 Mulga
- 9 Chenopods
- 10 Myall woodlands
- 11 Riparian woody
- 12 Acacia Tall Shrublands >2m
- 13 Tall Shrublands >2m
- 14 Lignum
- 15 Mallee
- 16 Nitre wetlands and floodways
- 17 Hopbush
- 18 Leopard wood
- 19 Low shrublands <2m

- 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

Full details will be provided in the pending Technical Report.

VIS_ID 4492

Resource locator

Data Quality Statement	Name: Data Quality Statement Protocol: WWW:DOWNLOAD-1.0-http--download Description: Data quality statement for State Vegetation Type Map: Western Region v1.0. VIS_ID 4893 Function: download
Download Package	Name: Download Package Protocol: WWW:DOWNLOAD-1.0-http--download Description: Data (GDB feature class) and documents... Function: download
WMS	Name: WMS Protocol: WWW:DOWNLOAD-1.0-http--download Description: Web Map Service 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	ba019dce-9d32-43d2-abf4-b656159fec97
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/ba019dce-9d32-43d2-abf4-b656159fec97
Purpose	This dataset was developed under the OEH State Vegetation Map project to provide government and community with regional scale information about native vegetation communities. This map uses the (as best as posible) the Plant Community Type classification used in biodiversity assesment tools under the NSW Biodiversity Conservation Act.
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 FLORA-Native VEGETATION
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16

Geographic location

West bounding longitude	140.99928
East bounding longitude	148.99909
North bounding latitude	-34.81765
South bounding latitude	-28.9716
NSW Place Name	Western NSW

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. This may change after product review. Please refer to technical notes (SVTM_Western_v1p0_Technical_Notes.pdf) for more detail on the methodologies and source datasets. The PCT map was derived primarily using a spatial modeling approach augmented with high resolution time-series 2.5m SPOT 5 imagery for visual interpretation and automated line-work derivation. This time series composite minimises scene-to-scene differences, removes cloud artefacts, improves perceivable detail and provides patterns based on plant functional responses over time (Day et al. In Prep). Vegetation Survey and Classification: The survey records were classified using agglomerative hierarchical clustering in PRIMER (Clarke et al, 2015), then assigned to an existing PCT using a semi-automated classification program, SAAP (Oliver et al 2013). The allocations were then checked manually and adjusted using expert opinion and reference material. For Western NSW, 12,158 survey records were allocated a PCT including 7001 full floristic sites, across a variety of Formations, recording 175 unique 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. Segmentation was performed using the time-series enhanced SPOT-5 image. This process provided the line work for subsequent PCT attribution. Visual attribution of Vegetation Photo Patterns (VPPs):: Every polygon in the region was assigned a VPP by firstly attributing unsupervised classes (isodata). The unsupervised classification was based on time-series SPOT 5, a red-green index and SPOT 5 derived foliage projected cover. This accelerated the assignment of VPP's over a purely manual approach by providing a spatially consistent draft classes of VPPs (Day et al. In Prep). The classes were further edited manually at finer scales where necessary. 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 and time-series SPOT 5 imagery. Every polygon was visually checked by an expert interpreter. 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 is found in the Technical Notes. A pool of PCT models compete per VPP. These are described further in the technical notes. Integration of Existing Mapping: Extractions from three 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 and can be identified using the following queries: • VIS 4186 - Survey and mapping of Darling floodplain vegetation communities in 2014 (!mapSource! = 'Existing Mapping VIS 4186') • Balonne mapping 2016 (!mapSource! = 'Balonne_vegetation_20160113') • Darling mapping 2016 (!mapSource! + 'Darling_vegetation_20160120') Post modelling: The modelled surface was inspected visually where possible and manually edited by an expert ecologists to address any obvious anomalies due to source data limitations such as a low sample density or course environmental data.
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

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 date

2024-02-26T15:24:15.122391

Metadata language