Title Central West / Lachlan Regional Native Vegetation Map (NSW Formation and Class) Version 1.0. VIS_ID 4214

Alternative title(s)

CentWestLach v1 0 Keith E 4214

Abstract

This version (v1.0) is released for interim review for 3 months from release date. A subsequent official release will be published after review and subsequent alterations.

Please note, Central West / Lachlan Regional Native Vegetation Map (NSW Formation and Class) Version 1.0. VIS_ID 4214 web service and zipped dataset will be archived and will no longer be available on line after 31st March 2025.

The primary thematic data layer in this dataset is a map of regional scale Plant Community Types (PCT's). The map was developed from a process using vegetation surveys, remote sensing derivations, visual interpretation and spatial distribution models.

The download package includes a merged and simplified version of the full dataset.

The full dataset comprises the following data layers as delivered in an ArcGIS 9.3 File Geo-database:

MAP SHEET DATA: (CWLpct_v1p0.gdb\PCTv1) provided as 100k map sheets comprising detailed vegetation line-work with the following attributions per polygon:

FIELDS: !CWLpct_v1! - Plant Community Type (PCT) Codes !CommName! - Plant Community Type Common Names !KeithClass! - The mapped PCT's associated Keith Class !KeithForm! - The maplped PCT's assocated Keith Formation !Cover! - Percent woody cover per polygon (0 - 1.0) derived from the NSW Woody Vegetation Extent 2011 dataset. !EnvPCT1! - Most likely modelled PCT !EnvPCT2! - Second most likely modelled PCT !EnvPCT3! - Third most likely modelled PCT !confcat! - Categorical modelling confidence levels of EnvPCT1 (High > 60%, Medium 30%-60%, Low < 30%, None). None = non-modelling attribution (either manual expert API or pre-existing mapping) !cwlscv1up! - Expert Manual API code of structural class. Look up table below. !hectares! - Size of polygon in hectares

While much of the aerial photo interpretation employed was undertaken at around 1:8000, PCT attribution is generally at a much coarser scale. We recommend that the highest resolution appropriate for this product be 1:15000.

VALIDATION SUMMARY: Pending Technical Report.

ACCOMPANYING DATASETS:

KEITH CLASS QUICK-VIEW DISSOLVE: CWLpct_v1p0.gdb\KCv1\CWL_KC This is a dissolved (internal attribute polygon boundaries removed) and CWL-wide merged version of the Keith Class as found in the complete linework sheets of 100K Map sheet Data.

CWI BOUNDARY: CWLpct_v1p0.gdb\Boundaries\CWL_Boundary: A polygon boundary of the Central-West Lachlan v1 Regional Vegetation Map

CWL 100K SHEET BOUNDARIES: CWLpct_v1p0.gdb\Boundaries\CWL_100k Polygon boundaries of the 100k sheet extents within the CWL v1 extent.

SURVEY SITES: CWLpct_v1p0.gdb\Surveys\CWL_Sites_PCT_20150528 Point locations of on-ground rapid or full floristic vegetation surveys. Pertinent Fields: !SURVEYID! - code identifying for which project the sites were commissioned. !SITENUMBER! - Unique site code identifier. !PCT_1_0528! - Attributed PCT Code classification !PCT_1_0528! - Alternative PCT Code classification

LOOK UP TABLE: PCT Code, Name, Keith class & Keith Formation look-up: CWLpct $v1p0.gdb\CWL\ LUT$

MXD: CWLpct v1p0.mxd

ACCESS QUERIES: For access queries regarding the full dataset, please contact: data.broker@environment.nsw.gov.au

VIS_ID 4214

Resource locator

Data Quality Statement Name: Data Quality Statement

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

Description:

Data quality statement for Central West / Lachlan Regional Native Vegetation Map (NSW Formation and Class) Version 1.0. VIS ID 4214

Function: download

Unique resource identifier

Code c4c8e030-647c-4f81-b678-d7d6a61d7359

Presentation

form

Map digital

Edition unknown

Dataset language

English

Metadata standard

Name ISO 19115

Edition 2016

Dataset URI https://datasets.seed.nsw.gov.au/dataset/c4c8e030-647c-4f81-b678-d7d6a61d7359

Purpose This dataset was developed as part of the OEH State Vegetation Map to provide government and community with regional -scale information about native vegetation.

Status On going

Spatial representation

Type vector

Geometric Object Type

complex

Geometric Object Count

1

Spatial reference system

Code

identifying the

spatial reference system

4283

Equivalent

scale

1:None

Additional information

source

General Notes:

For details on methodology and validation please refer to the CWL Technical Notes. Technical Notes Pending.

NSW Office of Environment and Heritage, 2015. BRG-Namoi Regional Native Vegetation Mapping. Technical Notes, NSW Office of Environment and Heritage, Sydney, Australia.

Central West /Lachlan Regional Native Vegetation Mapping

Please note related dataset: CentWestLach_v1_0_PCT_E_4358. This dataset also

includes PCT classification.



| Keyword set | | | | | |
|--|---|--|--|--|--|
| keyword value | Central West | | | | |
| | Lachlan | | | | |
| | CWL | | | | |
| | PCT Plant Community Types | | | | |
| | | | | | |
| | Regional Scale Vegetation Mapping | | | | |
| Originating controlled vocabulary | | | | | |
| Title | ANZLIC Search Words | | | | |
| Reference date | 2008-05-16 | | | | |
| Geographic location | | | | | |
| West bounding longitude | 143.82802 | | | | |
| East bounding longitude | 150.362018 | | | | |
| North bounding latitude | -34.74714 | | | | |
| South bounding latitude | -30.11553 | | | | |
| 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 | 2015-10-09 | | | | |
| 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 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 11000 existing sites after data cleaning. A large number of gaps in existing survey coverage were evident and required further survey information. 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 patterns from existing stereoscopic aerial photo interpretation and those recognised in high spatial resolution imagery (ADS40) were used as a reference point. Segmentation was performed using ADS40, SPOT 5 and SRTM derived topographic indices. This process provided the line work for subsequent PCT attribution.

Visual attribution of Landscape Class: The purpose of attributing Landscape 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 with commensurate less computing effort/time. A landscape class was attributed to every polygon in the study area. Landscape classes were aided by reference to existing mapping. Corrections were made based on ADS40 with on-screen attribution. 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 a certain geographic range, 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. The type models were constrained to particular ranges of a topographic position index, again based on literature review and expert opinion. Not all types were constrained by topographic envelopes, as some were considered to be less correlated with particular topographic positions.

Spatial Distribution Modeling of Plant Community Types. Modeling of PCT used Boosted Regression Trees (BRT). A suite of candidate environmental predictor variables, including climate, geology, soil, geophysical data, and terrain indices, were compiled for use in BRT models. A comprehensive list of these predictor variables will be found in the Technical Notes.

Uplifted API and Expert Editing: Vegetation communities from the MacquarieMarshesVeg2008_VIS3920 (Bowen, S. & Simpson, S. (2009)) were spatially translated into the current line-work via a majority extent per polygon algorithm. The vegetation community mapping resulting from the aforementioned procedures was extensively edited on screen to correct attribution where there may have been for example existing API, missed vegetation, ecological anomalies, incorrect assignments, modeling noise and inclusion of late site data.

For further details on methodology and validation please refer to the pending Central West Regional Native Vegetation Mapping Technical Notes Version 1.0.

| Limit | tati | ons | on | pub | lic | access |
|-------|------|-----|----|-----|-----|--------|
| | | | | | | |

Scope dataset

DQ Topological Consistency

Effective date 1901-01-01

Explanation geometrically and topologically correct

DQ Absolute External Positional Accuracy

Effective date 1901-01-01

Responsible party

Contact position Data Broker

Organisation name NSW Department of Climate Change, Energy, the Environment and Water

Telephone number 131555

Email address <u>data.broker@environment.nsw.gov.au</u>

Web address https://www.nsw.gov.au/departments-and-agencies/dcceew

Responsible party role pointOfContact

Metadata point of contact

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Responsible party role pointOfContact

Metadata date 2024-10-09T02:17:59.324040

Metadata language