

Title	Border Rivers/Gwydir/Namoi Regional Vegetation Version 2 VIS_ID 4204
Alternative title(s)	BRGN_v2_Dissolve_MapSource_4204
Abstract	<p>This dataset was superseded by the State Vegetation Type Map (https://datasets.seed.nsw.gov.au/dataset/nsw-state-vegetation-type-map) on 24.06.2022.</p> <p>Please note, Border Rivers/Gwydir/Namoi Regional Vegetation Version 2 VIS_ID 4204 web service and zipped dataset will be archived and will no longer be available on line after 31st March 2025.</p> <p>This dataset was developed as part of the OEH State Vegetation Map to provide government and community with regional -scale information about native vegetation.</p> <p>The Border Rivers Gwydir and Namoi Regional Vegetation Map is a subset of the state-wide vegetation mapping and classification program undertaken by the NSW Office of Environment and Heritage (OEH Regional Scale State Vegetation Map) and covers the two former Catchment Management Authority Regions. 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 full dataset comprises the following data layers as delivered in an ArcGIS 9.3 File Geo-database: PLANT COMMUNITY TYPE: The primary map of Plant Community Types developed from an ensemble of visual interpretation of high resolution imagery and spatial distribution models. WOODY EXTENT LAYER: A map of woody vegetation derived from classification of 5m SPOT-5 imagery. KEITH CLASS: A map based on aerial photo interpretation and spatial distribution models. MAP SOURCE: A map of the various sources of information used including spatial models, visual interpretation and existing map products. SURVEY DENSITY ALL: A map of the density of all survey sites used. SURVEY DENSITY FULL FLORISTICS: A map of the density of only full floristic survey sites used. MODELLING CONFIDENCE: A map of the confidence outcomes achieved. While much of the aerial photo interpretation employed was undertaken at around 1:8000, PCT attribution is generally at a much coarser scale. The Map Source layer (as described above) can be used as a guide to how vegetation attribution was derived. We recommend that the highest resolution appropriate for this product be 1:15000. Validation Summary: PCT Map: Based on 100% of the survey data (modelling and hand mapping), the final mapped product has an accuracy in the range 68%-70% for prediction of the three most likely PCTs. Be aware that these accuracies are highly variable across each PCT. Some PCT's utilised more site data than others. Keith Class reached a 76% accuracy using the independent test data. Modelled PCT and modelled top 3 PCT overall accuracies were 53% and 68% respectively. Woody Extent received a 92% overall accuracy. Accompanying documents: BRG-Namoi Technical Notes.pdf - Technical Report BRGN_PCT_KC_LUT.xls - A look-up table listing the relationship between PCT, Keith Class and Keith Formation classifications. BRGNv2_Spatial_Layer_Descriptors.txt BRGN_V2.mxd Border Rivers Gwydir / Namoi Regional Native Vegetation Mapping Technical Notes Version 1.0. Reference: NSW Office of Environment and Heritage, 2015. BRG-Namoi Regional Native Vegetation Mapping. Technical Notes, NSW Office of Environment and Heritage, Sydney, Australia. The download package contains a "quick view" map composite of the study area only. The quick view maps are of PCT, Keith Class, Keith Form, Map Source and Modelling Confidence. They also show the broad-scale line work. For more detailed line work and woody percent per polygon, please refer to the full dataset.</p> <p>For access queries regarding the full dataset, please contact: data.broker@environment.nsw.gov.au BRG_Namoi_v2_0_E_4204. VIS_ID 4204</p>
Resource locator	
Data Quality Statement	<p>Name: Data Quality Statement</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Data quality statement for Border Rivers/Gwydir/Namoi Regional Vegetation Version 2 VIS_ID 4204</p> <p>Function: download</p>
Unique resource identifier	
Code	4d9a19e5-4742-4079-a33a-47d80b163e37

Presentation form	Map digital
Edition	2.0
Dataset language	English
Metadata standard	
Name	ISO 19115
Edition	2016
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/4d9a19e5-4742-4079-a33a-47d80b163e37
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	Completed
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	A technical report is in press: State of New South Wales and Office of Environment and Heritage (2016) NSW State Vegetation Type Map – Central NSW, Part A:
Topic category	

Keyword set	
keyword value	BRGN 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	147.39402
East bounding longitude	152.11903
North bounding latitude	-31.85658
South bounding latitude	-28.53715
NSW Place Name	Central West Lachlan
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	2014-01-01
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/dccew
Responsible party role	pointOfContact

Lineage

A summary of the product's lineage is below. Please refer to the Technical Report (in press) 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 9054 existing sites after data cleaning. A large number of gaps in existing survey coverage were evident and required further survey information. Stratification based on archive broad vegetation type mapping (Regional Vegetation Types; Eco Logical Australia 2008b) and gap analysis was undertaken to select locations for additional plot data collection. A total of 6013 additional rapid data points were collected. 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. The existing plot data were allocated across 258 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. 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 modelling 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.

Modelling Envelopes: As a further constraint to modelling 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 Keith Class (Keith 2004) models were constrained to 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 Modelling of Keith Classes and Plant Community Types. Modelling of Keith Class and PCT used a combination (ensemble) of Generalised Dissimilarity Model (GDM), Boosted Regression Trees (BRT), and a simple Nearest Neighbour model. A suite of candidate environmental predictor variables, including climate, geology, soil, geophysical data, and terrain indices, were compiled for use in the GDM and BRT models. A comprehensive list of these predictor variables can be found in the Technical Notes v1.0.

Uplifted API and Expert Editing: Vegetation communities from the Gwydir Wetlands and Floodplain Vegetation Map 2008 (Bowen & Simpson 2010) 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, modelling noise and inclusion of late site data. The extent of each attribution source is delineated by the Map Source data layer provided in this dataset.

For further details on methodology and validation please refer to the report (in prep).
Reference: State of New South Wales and Office of Environment and Heritage (2016) NSW State Vegetation Type Map - Central NSW, Part A: Summary, NSW Office of Environment and Heritage, Sydney, Australia.

Limitations on public access

Scope	dataset
DQ Conceptual Consistency	
Effective date	1901-01-01
DQ Topological Consistency	
Effective date	1901-01-01
Explanation	Geometrically & 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	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	2024-10-09T02:17:53.059092
Metadata language	