| Title                      | Vegetation Map of the Bellingen Local Government Area, 2013. VIS_ID 4188  |  |  |  |
|----------------------------|---|--|--|--|
| Alternative<br>title(s)    | BellingenLGA_2013_E_4188  |  |  |  |
| Abstract                   | This dataset represents fine-scale floristic vegetation mapping within eastern freehold<br>lands of the Bellingen Local Government Area. Vegetation has been categorized into<br>communities, classes and formations, with the composition of respective vegetation<br>species identified. Mapping was conducted by vegetation mapping 'experts' (NSW<br>Office of Environment and Heritage) between September 2011 and December 2012,<br>and was based on 3-D PLANAR modelling, aerial photography interpretation and field<br>floristic assessment. |  |  |  |
|                            | VIS_ID 4188   |  |  |  |
| Resource locator           |   |  |  |  |
| Show on SEED               | Name: Show on SEED Web Map  |  |  |  |
| <u>Web Map</u>             | Protocol: WWW:DOWNLOAD-1.0-httpdownload   |  |  |  |
|                            | Description:  |  |  |  |
|                            | Display dataset on SEED's map   |  |  |  |
|                            | Function: download  |  |  |  |
| Data Quality               | Name: Data Quality Statement  |  |  |  |
| <u>Statement</u>           | Protocol: WWW:DOWNLOAD-1.0-httpdownload   |  |  |  |
|                            | Description:  |  |  |  |
|                            | Data quality statement for Vegetation Map of the Bellingen Local Government Area, 2013. VIS_ID 4188   |  |  |  |
|                            | Function: download  |  |  |  |
| <u>Download</u>            | Name: Download Package  |  |  |  |
| <u>Package</u>             | Protocol: WWW:DOWNLOAD-1.0-httpdownload   |  |  |  |
|                            | Description:  |  |  |  |
|                            | Data and Documents  |  |  |  |
|                            | Function: download  |  |  |  |
| REST Service               | Name: REST Service  |  |  |  |
|                            | Protocol: WWW:DOWNLOAD-1.0-httpdownload   |  |  |  |
|                            | Description:  |  |  |  |
|                            | ArcGIS REST Services Directory – provides a variety of interfaces for web browsers, GIS users and developers.   |  |  |  |
|                            | Function: download  |  |  |  |
| <u>WMS</u>                 | Name: WMS   |  |  |  |
|                            | Protocol: WWW:DOWNLOAD-1.0-httpdownload   |  |  |  |
|                            | Description:  |  |  |  |
|                            | Web Map Service   |  |  |  |
|                            | Function: download  |  |  |  |
| Unique resource identifier |   |  |  |  |
| Code                       | 999c3b31-fc25-4f7c-a7a3-fd499f82d8e1  |  |  |  |
| Presentation               | Man digital   |  |  |  |

| form  |  |  |  |  |
|---|--|--|--|--|
| Edition   | 21/11/2014   |  |  |  |
| Dataset<br>language                                       | English  |  |  |  |
| Metadata standard   |  |  |  |  |
| Name  | ISO 19115  |  |  |  |
| Edition   | 2016   |  |  |  |
| Dataset URI   | https://datasets.seed.nsw.gov.au/dataset/999c3b31-fc25-4f7c-a7a3-fd499f82d8e1  |  |  |  |
| Purpose   | The dataset was primarily designed to identify vegetation communities to support<br>Koala Habitat modelling and identification of potential EEC's for display and<br>interpretation at scales no finer than 1:5,000. Non-natural areas, devoid of vegetation,<br>have not been mapped. Various levels of attribute confidence are identified within the<br>data's 'Reliability' attribute field. Users are reminded that the layer represents a model,<br>and should only be regarded as an interpretation or prediction of real-world<br>phenomena. |  |  |  |
| Status  | Completed  |  |  |  |
| Spatial representation                                    |  |  |  |  |
| Туре  | vector   |  |  |  |
| Geometric<br>Object Type                                  | curve  |  |  |  |
| Geometric<br>Object Count                                 | 1  |  |  |  |
| Spatial reference system                                  |  |  |  |  |
| Code<br>identifying the<br>spatial<br>reference<br>system | 4283   |  |  |  |
| Spatial resolution  | 10 m   |  |  |  |
| Additional<br>information<br>source                       | NSW Office of Environment and Heritage (2013). Plant Community Type Mapping (PCT<br>) in the Bellingen Local Government Area. Office of Environment and Heritage, Coffs<br>Harbour NSW Australia.<br>These data supersede 2006 vegetation mapping of Bellingen LGA (coastal part):<br>BellingenCoast_2006_E_85 BellingenCoastEECs_2006_E_84<br>BellingenCoastCondn_2006_E_86   |  |  |  |
| Topic category  |  |  |  |  |

| Keyword set                                      |   |  |  |  |  |
|--|---|--|--|--|--|
| keyword value                                    | Bellingen   |  |  |  |  |
|  | Vegetation  |  |  |  |  |
|  | VIS Classification  |  |  |  |  |
|  | Vegetation Communities  |  |  |  |  |
| Originating controlled vocabulary                |   |  |  |  |  |
| Title  | ANZLIC Search Words   |  |  |  |  |
| Reference date                                   | 2008-05-16  |  |  |  |  |
| Geographic location                              |   |  |  |  |  |
| West bounding longitude                          | 152.77633   |  |  |  |  |
| East bounding longitude                          | 153.05677   |  |  |  |  |
| North bounding latitude                          | -30.566788  |  |  |  |  |
| South bounding latitude                          | -30.3405  |  |  |  |  |
| NSW Place Name                                   | Bellingen LGA   |  |  |  |  |
| 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                                   | 2012-12-20  |  |  |  |  |
| 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  |  |  |  |  |

Funding was made available for a Koala habitat study under the Saving out Species 'iconics' Lineage funding. The Koala habitat study required accurate and fine scale vegetation data to underpin the modelling of primary and secondary habitat values. The opportunity existed to upgrade both the linework and classification of the existing forest ecosystems map to match the current OEH standards in mapping and classification. This layer utilises improvements in aerial imagery (ADS40), an upgraded classification (NSW Vegetation Classification and Assessment) and developments in 3D stereo mapping environments. The study was designed in response to available funding and koala study priorities. The study area was tailored to the needs of the Koala Habitat study and covered 24 326ha of lowlands, coastal hills, escarpments and alluvial plains in the eastern part of the Bellingen LGA. Source data for this layer has two components, the floristic field based site data and the other being high resolution aerial photography and LiDAR. SITE DATA. At the beginning of the mapping study, 224 full floristic flora survey plots from previous studies occurred in the Bellingen LGA, with an additional 82 rapid floristic sites. However, in the study area (a priority subset of the LGA) there were 8 full floristic and 23 rapid (mostly canopy species) sites. This bias in the existing data made the initial stages of the project difficult and focusedon collecting field data to support the mapping. Thanks to participating landholders an additional 874 field API rapid data sites were collected during the project (canopy species and some lower strata, PCT id sites) on non-public lands. AERIAL PHOTOGRAPHY (ADS40) and LiDAR. The NSW Land and Property Information (LPI) captures airborne ADS40 4-band digital imagery at 50cm resolution for most of NSW. The Macksville and Nambucca (April 09) 1:100k tile, the Dorrigo (September 09) 1:100k and the Coffs Harbour (September 09) 1:100k covered the Bellingen LGA study area. Two levels of imagery were utilised for the project, the 4-band 2dimensional orthorectified images and the Level 1 Rectified stereo image pair strips. The Level 1 data was used for 3-dimensional mapping in an ArcGIS stereo environment. LiDAR, also captured by LPI was utilised as 2D contextual data to help guide mapping decisions and to convert mapping data to 3D format. LiDAR only covered the eastern portion of the LGA and thus ADS40 derived elevation data was used where LiDAR was absent. MAPPING PROCESS. Mapping was conducted by API/botanical experts in a stereo view workstation comprising of PLANAR monitors, ESRI ArcMap software and ERDAS Stereo Analyst software. The environment allows the direct delineation and attribution of polygons in 3D stereo view (Level 1 imagery) whilst simultaneously having a 2D context view and any number of additional datasets to guide mapping decisions. Interpreters used a detailed Bellingen LGA landcover layer as the starting point for each tile as an efficiency for the process. Interpreters had at their disposal all site data (31 sites) in 3D. Interpreters routinely collected field check points with GPS to help extrapolate across areas of difficult interpretability. A total of 874 check points were collected for the project where public access was permissible. The mapping was conducted at on screen at a range of scales but the final reference scale is deemed to be 1:5000. Linework was digitised using live streaming with a stream tolerance average of 5 metres ie a vertex every 5 metres. The study area was divided into 9 tiles for stereo mapping and the interpreters cross referenced each other whenever possible to help guide the consistency of mapping decisions. The tiles were stitched together in GIS and interpreters then reviewed the edges and remapped any inconsistencies. A final quality review of the stitched map was conducted by examining each community in isolation and reviewing it for errors and ecological distribution anomalies. This review process fed back in further refinements and edits. Overall, the linework is very accurate as it is based upon the Bellingen LGA land cover layer. Minimal discrepancies were found between 3D and 2D spatial accuracies

Limitations on public access

| Scope                                     | dataset  |   |  |  |
|---|--|---|--|--|
| DQ Completeness Commission                |  |   |  |  |
| Effective<br>date                         | 2017-01-01   |   |  |  |
| DQ Completene                             | ss Omissior  | 1   |  |  |
| Effective<br>date                         | 2017-01-01   |   |  |  |
| DQ Conceptual                             | Consistency  | /   |  |  |
| Effective<br>date                         | 2017-01-01   |   |  |  |
| Explanation                               | Geometry Appropriateness: Vegetation communities are delineated as polygons, suitable for the intended interpretation at property-level scales |   |  |  |
| DQ Topological Consistency                |  |   |  |  |
| Effective<br>date                         | 2017-01-01   |   |  |  |
| Explanation                               | Topology validation was performed with a tolerance of 0.2 metres and all subsequent gaps and overlapping polygons fixed. Topology is correct.  |   |  |  |
| DQ Absolute External Positional Accuracy  |  |   |  |  |
| Effective<br>date                         | 1901-01-01   |   |  |  |
| Explanation                               | not assessed   |   |  |  |
| DQ Non Quantitative Attribute Correctness |  |   |  |  |
| Effective<br>date                         | 2017-01-01   |   |  |  |
| Explanation                               | Qualitative attribution used consistently  |   |  |  |
| Responsible party                         |  |   |  |  |
| Contact positi                            | on   | Data Broker   |  |  |
| Organisation r                            | ame  | 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             | 2024-02-26T13:18:47.337145  |  |  |  |
| Metadata language         |   |  |  |  |