Title Fine-Scale Vegetation Mapping of the Coffs Harbour Local Government Area, 2012. VIS ID 4189

Alternative title(s)

CoffsHarbourLGA_2012_E_4189

Abstract

This dataset represents fine-scale floristic vegetation mapping within the Coffs Harbour Local Government Area. Vegetation has been categorized into communities, classes and formations, with the composition of respective vegetation species identified. Mapping was conducted by vegetation mapping 'experts' (NSW Department of Environment and Heritage) between September 2009 and April 2012, and was based on 3-D PLANAR modelling, aerial photography interpretation, field floristic assessment, and PATN statistical analysis.

A nominal scale of use of 1:5,000 is recommended for dataset display and interpretation, as linework digitising was based on ADS40 (50cm resolution) and minimum polygon size of 0.2 ha, and was captured at screen scale of between 1:1000 and 1:1500.

The map is not to be used at a property level scale or for development applications where a scale of 1:1200 or greater may be required to determine the level variation of vegetation within a property. Furthermore, DAs still need to undergo the rigour of planning laws in NSW including local assessment of impacts on flora and fauna.

Overall thematic accuracy is reported at 66% (independent assessment), with OEH reviewed overall accuracy being 77% weighted by total area of each vegetation class.

The dataset is to be considered a standalone layer.

VIS ID 4189

Resource locator

Data Quality Statement Name: Data Quality Statement

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

Description:

DQS for Coffs Harbour vegetation map

Function: download

<u>Download</u> <u>Package</u> Name: Download Package

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

Description:

Data and Documents
Function: download

<u>WMS</u>

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

ff74b1ed-641c-464f-8d4f-d4f33ac6d58d

Presentation form	mapDigital			
Edition	1			
Dataset language	eng			
Metadata standard				
Name	ANZLIC Metadata Profile: An Australian/New Zealand Profile of AS/NZS ISO 19115:2005, Geographic information - Metadata			
Version	1.1			
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/ff74b1ed-641c-464f-8d4f-d4f33ac6d58d			
Purpose	The dataset was primarily designed to identify vegetation communities, classes and formations, for display and interpretation at scales less than, or equal to, 1:5,000. Non-natural areas, devoid of vegetation, have not been mapped. Various levels of attribute confidence are identified within the data's 'Confidence' attribute field. Users are reminded that the layer represents a model, and should only be regarded as an interpretation or prediction of real-world phenomena.			
Status	completed			
Spatial repres	entation			
Туре	vector			
Spatial reference system				
Authority code	GDA94 Geographic (Lat\Long)			
Code identifying the spatial reference system	4283			
Equivalent scale	1:None			
Additional information source	Replaces CoffsHarbourLGA12_v1_1_E_3866. Includes draft PCT & EEC classifications.NSW Office of Environment and Heritage (2012). Development of a Fine-Scale Vegetation Map for the Coffs Harbour Local Government Area. Volume 1: Project Report. Office of Environment and Heritage, Coffs Harbour NSW Australia.Data available under Creative Commons.			
Topic categor	у			

Keyword set	
keyword value	BOUNDARIES-Biophysical
	FLORA-Native
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	152.79544
East bounding longitude	153.26203
North bounding latitude	-30.448434
South bounding latitude	-29.89739
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	2009-09-01
End position	N/A
Dataset reference date	
Date type	publication
Effective date	2017-06-29
Resource maintenance	
Maintenance and update frequency	None
Contact info	
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water
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Responsible party role	pointOfContact

Lineage

Source data for this layer has two components, the floristic field based site data and the other being high resolution aerial photography. SITE DATA. An initial site data audit from the NSW VIS Flora Survey database was conducted to determine the full floristic (FF) sites of sufficient quality available for PATN statistical analysis. Statistical gap analysis and stratification identified remaining ecological gaps and a further 180 FF sites (funded by Coffs Council) were funded to target these gaps. A subsequent further review of sites determined a total of 534 FF sites for PATN analysis. PATN analysis produced 66 vegetation communities with floristic descriptions ready for mapping. In addition, a further 462 rapid data sites were funded by Coffs Council to inform the mapping. The rapid sites collected up to 5 dominant species for 6 levels of vertical strata at each site. An enormous achievement of this project was site density is almost equal across both vegetated freehold and public tenures, a normally unavoidable bias that plaques most multi tenure mapping programs. AERIAL PHOTOGRAPHY. The NSW Land and Property Management Authority (LPMA) captures airborne ADS40 4-band digital imagery at 50cm resolution for most of NSW. The Coffs Harbour (Sep 09), Dorrigo (Sep 09) and Bare Pt (June 10) 1:100k ADS40 tiles covered the Coffs LGA. Two levels of imagery were utilised for the project, the 4-band 2-dimensional orthorectified images and the Level 1 Rectified stereo image pair strips. The Level 1 data was used for 3-dimensional mapping in a GIS stereo environment. Significant spatial errors up to +- 30 metres between Level 1 and the orthorectified data were discovered. 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 had at their disposal all site data (733 sites) in 3D. Interpreters routinely collected field check points with GPS to help extrapolate across areas of difficult interpretability. A total of 2479 check points were collected for the project but points were constrained to publicly accessible areas and areas that were visually accessible from public roads or tracks. This fieldwork resulted in an additional 8 map units were added to the existing 72 classified communities as a result of findings from this fieldwork. 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 10 tiles for stereo mapping and the interpreters cross referenced each other whenever possible to help guide their 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. Vegetation clearing from the Sapphire-to-Woolgoolga highway upgrade was applied to the map. A Worldview2 image captured on 7th Apr 2012 with 43cm spatial resolution was the baseline for delineating the highway clearing footprint. Due to the spatial accuracy issue between the Level 1 and ortho-rectified products, a final linework adjustment process for the study area was conducted using the orthorectified products as the accuracy reference. The focus of linework refinement was on vegetated/clearing interfaces, urban remnants, water bodies and other high contrast edges. Linework accuracy within contiguous vegetated areas were not systematically reviewed. All data stored and edited within ESRI File Geo-database format.

Limitations on public access

Scope dataset

Responsible party

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Responsible party role pointOfContact

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Responsible party role	distributor		
Metadata date	2014-12-05		
Metadata language	eng		