Title	Great Lakes LGA Vegetation 2003. VIS_ID 1287
Alternative title(s)	GreatLakesLGA_2003_E_1287
Abstract	Vegetation Mapping for parts of Great Lakes LGA undertaken by Kylie Marriot-Brown in 2003. The study area for this Vegetation Strategy generally consists of the eastern two-thirds of the Great Lakes LGA. Mapping has been completed for the entire 1:100,000 Bulahdelah Map Sheet. In the south, vegetation description and mapping has been undertaken in the area that extends east from the Pacific Highway, incorporating the Viney Creek, Hawks Nest and Tea Gardens area through to North Karuah. The mapping includes all private lands; council owned and managed lands and vacant crown lands. National Parks and State Forests have been excluded from this study.
	Due to the shortcomings of this broad mapping dataset and it's collation methodology the council no longer considers the layer to be a reliable indicator of vegetation communities within the LGA. However OEH has recently corrected the topology and coding of the dataset in the absense of more recent, finer vegetation mapping for the LGA area. There are no plans by the council to redo the mapping however they have mapped vegetation communities in the Hawks Nest/Tea Gardens area and in some locations surrounding Forster/Tuncurry via API. Attribute information for that data is only partially complete as the opportunities to undertake groundtruth works are rare. VIS_ID 1287
	Map footprint supplied only. Contact Great Lakes Council for access to the vegetation map.
Resource loca	tor
Data Quality	Name: Data Quality Statement
Statement	Protocol: WWW:DOWNLOAD-1.0-httpdownload
	Description:
	Data quality statement for Great Lakes LGA Vegetation 2003. VIS_ID 1287
	Function: download
Vegetation	Name: Vegetation GreatLakesLGA 1287
<u>GreatLakesLGA</u> <u>1287</u>	Protocol: WWW:DOWNLOAD-1.0-httpdownload
	Description:
	Data download package. Map footprint supplied only. Contact Great Lakes Council for access to the vegetation map.
	Function: download
Unique resourd	ce identifier
Code	7f93089e-5f35-4e18-97b2-cd8916982f9f
Presentation form	mapDigital
Edition	unknown
Dataset language	eng
Metadata stan	dard
Name	ANZLIC Metadata Profile: An Australian/New Zealand Profile of AS/NZS ISO 19115:2005, Geographic information - Metadata
Version	1.1
	https://datasets.seed.nsw.gov.au/dataset/7f93089e-5f35-4e18-97b2-cd8916982f9f

Dataset URI	
Purpose	Vegetation Mapping
Status	completed
Spatial repres	entation
Туре	vector
Spatial referer	nce system
Authority code	GDA94 Geographic (Lat\Long)
Code identifying the spatial reference system	4283
Equivalent scale	1:None
Additional information	Vegetation mapping commissioned by Great Lakes Shire Council. Metadata entered by OEH.
source	Great Lakes Shire Council 2003 Vegetation Strategy
	Footprint only supplied. Download package includes a readme file with information about data access.
Topic categor	у

Keyword set	
keyword value	VEGETATION
	VEGETATION-Floristic
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	152.0408
East bounding longitude	152.8603
North bounding latitude	-32.2349
South bounding latitude	-31.639
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	2003-06-01
End position	N/A
Dataset reference date	
Date type	publication
Effective date	2012-12-31
Resource maintenance	
Maintenance and update frequency	None
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Responsible party role	pointOfContact

Lineage The Classification System:

The classification is highly variable depending upon the scale of mapping, the subjective interpretation of communities and boundaries, the method used as a basis for the mapping and the amount of ground truthing undertaken. This study was not designed as an intensive, detailed and ground-truthed investigation of the entire LGA. Hence, a classification system was needed that could provide relatively detailed mapping without the use of such intensive ground-truthing. The State Forests (1989) publication, State Forest Research Note 17, is a broadly recognised system of forest classification. The system has been developed and refined over many years by State Forests of NSW personnel. The identification of forest types using this system is undertaken through a combination of aerial photographic interpretation and ground truthing. In fact, many of the forest types are used because they are recognisable from aerial photographs. This classification method was chosen as the basis of the mapping in part due to the ease of identifying vegetation units from aerial photographic interpretation. This enabled vegetation mapping to easily be conducted in the more inaccessible areas of the LGA and allow greater accuracy in light of a reduced groundtruthing effort in some areas. While State Forest Types was not originally intended as an ecological classification of forest vegetation in NSW, it has been used as a basis for other large-scale mapping projects (Beadle 1981). Furthermore, the conservation status of regional forest types has been based on the use of this classification system (Hager and Benson 1994). The use of Research Note 17 allowed the regional conservation status of the vegetation of the study area to be evaluated and determined. However, this system has a number of limitations and these are discussed in Section 3.1.5. Despite its inherent limitations, State Forests Research Note 17 has been used to form the basis of the mapping conducted within the study area for this project.

Aerial Photographic Interpretation:

Initial vegetation mapping involved API mainly using 1996 1:25,000 colour aerial photographs, although 1:50,000 photographs were also used in the southern portion of the study area. Preliminary vegetation boundaries were mapped and areas of investigation were identified. Vegetation stratification was based upon canopy texture, colour, height, density and uniformity.

## Ground Truthing:

Vegetated areas of the LGA were investigated on the ground through physical field investigations and inspections to check vegetation boundaries and community types. These investigations predominantly involved vehicle-based observation of roadside communities and walking transects within vegetation remnants. Detailed information from some areas was also obtained from previous field investigations and detailed local environmental studies conducted by Eco-Pro, including the Myall River Downs LES and local studies at Smiths Lake and Pacific Palms. The results of the field inspections and ground-truthing were utilised to enhance the reliability of the aerial photographic work. Boundaries were modified where necessary and photo patterns of verified units were used to assist in the identification of vegetation in other inaccessible areas. Flora and vegetation investigations conducted by other consultants and personnel were also incorporated into the vegetation mapping. This included the results of surveys by Elks (2001) at North Tuncurry and Great Lakes Council (undated) at Coomba Park foreshore, Forster/ South Forster and North Tuncurry/ Darawank.

Incorporation into GIS Database:

Once the vegetation boundaries and types were adequately mapped on the aerial photographs, the information was transferred to MapInfo. The information was digitised on the GIS by scanning the aerial photographs and registering them against topographical or physical spatial information, such as towns, rivers, lakes and roads. Vegetation boundaries were then digitised from the photograph onto the GIS. Mapping was conducted at a resolution of 0.5 hectares and included all stands of remnant vegetation greater than 0.5 hectares in size. Some areas of vegetation smaller than 0.5 hectare were also mapped during specific site-scale vegetation studies.

## Limitations:

The methodology utilised in this study has a number of recognised limitations.

## These are documented below:

A. The classification system used (State Forest Types using Research Note 17), was developed primarily as a management tool to aid in the planning of forestry operations. Therefore, more emphasis is placed on categories of eucalypt forest than other vegetation communities, such as heathlands, scrub and wetlands. The categories of limited silvicultural value are also often difficult to subdivide floristically unless ground truthing of every patch is undertaken. Therefore, the vegetation mapping of the LGA has not subdivided these non-eucalypt communities into floristic units;

B. The vegetation mapping does not divide the forest types into structural units, nor does it divide the units based upon understorey components. Grouping of vegetation is mainly undertaken by overstorey floristics. For example, blackbutt forest could potentially be further subdivided into tall closed forest, low closed forest, tall open forest and low open forest. The understorey components could also be utilised to further categorise blackbutt forests into blackbutt forest with grassy understorey, heathland understorey or fern

understorey;

C. An attempt to define the mapping of vegetation boundaries as accurately as possible was undertaken. However, due to a number of factors the vegetation types and boundaries mapped may be inconsistent with what is present on the ground. These factors include the scale of the aerial photographs, the thickness of pens utilised to mark the photographs, the level of accuracy able to be achieved in rectifying the photographs onto the GIS system and the inability to ground truth all vegetation patches within the LGA; and

D. The mapping is only accurate at the time the aerial photographs were taken, being the 1996/ 97 run of aerial photography. These limitations mean that the vegetation mapping of the LGA is not error free and cannot and should not be used to replace more detailed vegetation mapping and site assessments on individual properties. The mapping is only intended for use as an overall planning and management tool.

## Limitations on public access

Metadata language

eng

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