

## Metadata specifications

Category	Element	Comment
<b>Dataset</b>	Title	Land Use Classification of Northeast Region
<b>Custodian</b>	Custodian	Department of Primary Industries (DPI)
	Jurisdiction	Victoria
<b>Description</b>	Abstract	<p>This land use map has been prepared under contract for the Northeast Region. The classification scheme followed here was the Australia Land Use Mapping (ALUM) classification version 5 (BRS, 2001). ALUM version 5 was developed by BRS as a modification of Baxter – Russell Classification, in coordination with State agencies.</p> <p>This product is based on information from a number of sources: Corporate Geospatial Data Library (CGDL), DPI regional data sets, VGV Shire Valuation Datasets, satellite imagery, aerial photography, tree cover and field survey information.</p>
	Search Word(s)	Land use,
	Geographic Extent Name(s)	North-east Victoria,
	OR	
	Geographic Extent Polygon(s)	West: 146.130875 East: 148.219650 North: -35.929043 South: -37.318222
<b>Data Currency</b>	Beginning date	2001
	Ending date	2006
<b>Dataset Status</b>	Progress	In Progress - <b>Complete</b>
	Maintenance and Update Frequency	As required
<b>Access</b>	Stored Data Format	Arc/Info coverage
	Available Format	Arc/Info coverage
	Type	
<b>Data Quality</b>	Access Constraint	Access will be provided by DPI or BRS
	Lineage	<p>Created from</p> <p>(1) CGDL layers (DPI corporate geospatial data library) <i>Topographic and cadastral data layers</i></p> <ul style="list-style-type: none"> <li>• Digital cadastre 1:25,000 - VicMap Property (July 2003)</li> <li>• Transport - Roads and Rail 1:25,000 - VicMap Transport</li> <li>• Hydrologic features; line &amp; point 1:25,000 - VicMap Hydrology (Sep. 2003)</li> </ul> <p><i>State-wide/Regional land data and mapping layers</i></p> <ul style="list-style-type: none"> <li>• Public Land Management - current legal status of land 1:100,000 – plmmt100 (Sep. 2003)</li> <li>• Tree Cover - 1:25,000 - tree25 (June 2003)</li> </ul> <p>(2) Valuer-General of Victoria (VGV) Shire Valuation Datasets (Dec. 2002).</p> <p>(3) Fieldwork carried out in September 2004, January 2005, August 2005, January 2006</p> <p>(5) Aerial Photography:</p> <ul style="list-style-type: none"> <li>• NW Dryland Photography - 1:15,000 &amp; 1:25,000 flown in February &amp; March 2001</li> </ul> <p>(6) Satellite Imagery:</p> <ul style="list-style-type: none"> <li>• Spot5 - 30m Captured 1/11/2001</li> <li>• Landsat 5 ETM - 30m Captured 20/09/2004</li> <li>• Landsat 5 ETM - 30m Captured 27/08/2004</li> </ul> <p>• <b>Inputs and Processes - Draft Landuse Layer</b></p> <p>1. <i>Classification by Shire:</i> The draft classification was first performed on each of the shires that made up the catchment. The VicMap digital</p>

cadastre of each shire was first clipped to the catchment boundary before the classification was undertaken. These clipped shires would eventually be merged to form the one whole dataset.

2. *VGV Shire Valuation Dataset:*

The first step in the draft classification process was to use the Land Classification Codes (LCC) that were surveyed by the Valuers for each Shire. The Valuers assign an LCC code to each Property Number (PROPNUM) of a Shire's Vicmap Property cadastre. Using these Property Numbers, the Valuer's Landuse Dataset could then be linked to the corresponding shire's Vicmap Digital Property Cadastre. A Lookup Table was created that assigned an ALUM Classification Code to each of the 265 LCC codes. This Lookup table was then linked to the digital cadastre to provide a base landuse dataset for each shire. As the Valuer's dataset also contained other relevant information pertaining to landuse, this helped with the classification of the anomalies that were present within the LCC Codes (Eg. LCC Code 666 = Mixed Use Farming). Information regarding landuse such as the amount of land that is dryland, irrigated, horticulture, cropping or grazing may also be provided within the dataset, which could then be used to assign an ALUM code to the property. It must be noted that the quality of this information varied from shire to shire.

The product of this Valuer's information made up the base of the draft landuse dataset for each shire.

3. *Public Land Management Layer:*

The next step in the process was to classify the public land (i.e. Conservation and natural environments) within each shire. The latest 1:100,000 Public Land Management Layer from the CGDL (September 2003) was overlaid on the digital cadastre and an appropriate ALUM code was then assigned to each corresponding polygon.

• **Inputs and Processes - Final Landuse Layer**

1. *Refinement of Draft Landuse Layer:*

Building upon the Draft Landuse layer, cadastre parcels that remained unclassified or incorrectly classified in the intensive used areas of towns and irrigated horticulture were classified based upon aerial photography and satellite imagery.

2. *Merging Datasets:*

The completed landuse datasets of each shire were then merged together to produce the overall coverage of the catchment extent.

Positional Accuracy  
Attribute Accuracy

25 – 100 m

The accuracy of the land use attributes has been determined through a validation procedure. Validation was carried out for each shire, shortly after the completion of the land use data layer. 50 random sample sites were generated for every 245,000Ha. The number of sample sites allocated to each land use was proportional to the area of each land use class in each validation area. Land uses at sample sites were recorded by independent observers. An error matrix was constructed for each validation area, comparing mapped land use to independently observed land use classes. The validation results produce an attribute accuracy of 92.5%

- Logical Consistency
- **Data Collation**  
Integration of existing datasets containing information relating to landuse including remotely sensed Landsat 5 ETM, SPOT, aerial photography, DPI/DSE Corporate datasets including cadastre, public land, infrastructure and tree cover, and VGV Shire Valuation Datasets.
  - **Interpretation**  
This stage involved interpreting landuse, by assigning appropriate landuse codes to the source datasets and preparing draft landuse maps for verification and field checking.
  - **Verification**  
Field verification of draft landuse maps included the annotation of field maps on the basis of expert advice and field checking. The primary focus of this activity was to capture agricultural landuse and incorporated extensive windscreen surveys, utilising mobile mapping technology and local knowledge of DPI/DSE staff.
  - **Final Editing**  
Final editing was carried out using ArcGIS 9.1, ArcView 3.3 and ArcInfo Workstation.

	Completeness	Land Use has been mapped across the full extent of the study area down to a minimum secondary ALUM Version 5 level.
<b>Contact Information</b>	Contact Organisation	Department of Primary Industries, CAS - Benalla
	Contact Position	Landscape Protection GIS Services
	Mail Address 1	89
	Mail Address 2	Sydney Road
	Suburb or Place or Locality	Benalla
	State or Locality 2	Victoria
	Country	Australia
	Postcode	3672
	Telephone	5761 1611
	Facsimile	5761 1628
	Electronic Mail Address	
<b>Metadata Date</b>	Metadata Date	24 January 2006
<b>Additional Information</b>	Additional Information	Key Reference Bureau of Rural Sciences (BRS), 2002, <i>Land Use Mapping at Catchment Scale: Principles, Procedures and Definitions</i> , Edition 2, February 2002, BRS Document, Canberra.
<b>File Transfer Details</b>	Files name(s) and size(s)	Ne_lum94geo: 34.6 MB
	Number of Records	Ne_lum94geo: 47943
	File Format	Arc/Info
	Field Name Definitions	Main item: lu_code, lu_description, source_scale, source_date, source_desc, luc_date
		Look-up Tables: multiple_uses.lut, working_lucode_v5, source_lut
		Reliability definitions (source.lut): 1 = Field Mapping/Local Knowledge 2 = Ancillary Dataset 3 = Aerial Photography & VG Validation Dataset 4 = SPOT imagery and Landsat 5 ETM/TM 5 = Other
	Fields Names Update	Fields names in each file Full or partial
	Date of Creation	June 2005