METADATA STATEMENT: LAND USE MAPPING - EASTERN NEW SOUTH WALES

Category	Element	Description
Data set	Title	Land Use: Eastern New South Wales
Custodian	Custodian	Group General Manager, Natural Resource Products Division, NSW Department of Infrastructure, Planning and Natural Resources (DIPNR), 23-33 Bridge Street SYDNEY NSW AUSTRALIA 2000
	Jurisdiction	New South Wales, Australia
Description	Abstract	A data set of land use as at June 2000 for eastern New South Wales extending from the coast to the western plains. Land use is classified to three separate classification schemes. These classification schemes are: ❑ NSW Land Use Mapping Program (LUMAP). ❑ NSW SCALD (Standard Classification for Attributes of Land) Classification ❑ ALUM (Australian Land Use and Management) Classification. The LUMAP Classification is DIPNR's most recent classification for mapping of land use classes for NSW. It is a simple numeric classification, open-ended to enable additional classes to be added. Prior to LUMAP, the SCALD classification was the standard for mapping of land use in NSW. It is a combined alpha-numeric classification system. The ALUM classification is based upon the modified Baxter & Russell classification and presented according to the specifications contained in www.LUCs.gov.au/land&water/landuse. Versions 4 and 5 of the classification are used to describe the land use classes. The mapping was commenced in April 2001 and is on-going. The date of the data set is set as the land use occurring at the time the satellite imagery was acquired in between 1999 and 2000.
	Search Word	Land use, land use mapping
	Geographical Extent Name	Eastern New South Wales extending from the coast to the start of the western plains.
	GEN Category	Covers the following 1:100 000 map sheets (listed by map sheet number): 9640-1; 9535-9541; 9433-9441; 9332-9341; 9231-9240; 9129-9140; 9129-9140; 9027-9040; 8923-8940; 8823-8838; 8723-8735; 8623-8634; 8524-8533; 8425-8432; 8325-8331; 8225-8230; 8125-8130. Includes parts or all of the following Local Government areas: Albury, Armidale Dumaresq, Ballina, Barraba, Bathurst, Bega Valley, Bellingen, Berrigan, Bingara, Bland, Blayney, Blue Mountains, Bombala, Boorowa, Byron, Cabonne, Camden, pt Carrathool, Cessnock, Coffs Harbour, pt Conargo, Coolah, Cooma-Monaro, pt Coonabarabran,

		Cootamundra, Copmanhurst, Corowa, Cowra, Crookwell, Culcairn, Deniliquin, Dubbo, Dungog, Eurobodalla, Evans, Forbes, pt Gilgandra, Glen Innes, Gloucester, Gosford, Goulburn, Grafton, Great Lakes, Greater Taree, Griffith, Gundagai, Gunnedah, Gunning, Guyra, Harden, Hastings, Hawkesbury, pt Hay, Holbrook, Hume, Inverell, Jerilderie, Junee, Kempsey, Kiama, Kyogle, pt Lachlan, Lake Macquarie, Lismore, Lithgow, Lockhart, Maclean, Maitland, Manilla, Merriwa, pt Moree Plains, Mudgee, Mulwaree, Murrumbidgee, Murrurundi, Muswellbrook, Nambucca, pt Narrabri, Narrandera, pt Narromine, Newcastle, Nundle, Oberon, Orange, Parkes, Parry, Penrith, Port Stephens, Pristine Waters, Queanbeyan, Quirindi, Richmond Valley, Rylstone, Scone, Severn, Shellharbour, Shoalhaven, Singleton, Snowy River, Tallaganda, Tamworth, Temora, Tenterfield, Tumbarumba, Tumut, Tweed, Uralla, Urana, Wagga Wagga, Walcha, Weddin, Wellington, Wingecarribee, Wollondilly, Wollongong, Wyong, Yallaroi, Yarrowlumla, Yass, Young and Unincorporated LGA's.
	GEN Custodial Jurisdiction	Eastern and central New South Wales
	GEN Name	
	Geographical Extent Polygon	
	Geographic Bounding Box	
	North Bounding Latitude	-28.168918
	South Bounding Latitude	-33.601080
	East Bounding Longitude	153.491461
	West Bounding Longitude	147.971439
Data Currency	Beginning Date	October 1999
	Ending Date	
Dataset Status	Progress	On going
	Maintenance & Update Frequency	On going as required. There are no proposals to update the land use data at this stage.
Access	Stored Data Format	ArcGIS PGDB, ArcInfo coverage, Shapefile
	Available Format Type	ARCInfo coverage, ARCInfo Export, PGDB, Shapefile (UTM, AGD66 or GDA94 datums)
	Access Constraint	Unrestricted

Data Quality	Lineage	The data set is a new series of land use maps prepared by DIPNR for eastern and central New South Wales. Line work is drawn on 1:50 000 plots of satellite imagery. Information plotted onto the satellite imagery prior to mapping comprises: ▪ the cadastral layer from the NSW Digital Cadastral Database ▪ boundaries of State Forests, National Parks and Nature Reserves from the NSW Digital Cadastral Database ▪ Property Agreements and Management Contracts funded under the NSW State Government's Native Vegetation Management Fund ▪ clearing consents issued by the NSW Department of Infrastructure, Planning and Natural Resources for the establishment of hardwood, softwood or tea-tree plantations ▪ land use information prepared as part of the mapping of native vegetation. The ALUM classification defines three levels of land use description – primary, secondary and tertiary. For the majority of the land use descriptions is down to the tertiary level. Mapping was undertaken directly onto the satellite imagery or rectified aerial photograph mosaics using the satellite imagery, aerial photography, existing data sets, local knowledge and field checking as the main data sources. For map sheets so far completed, details of the aerial photography are: ▪ Armidale NSW 4556, 4557, 4561 & 4562, Runs 1-13, Flown May-June 2001, Scale 1:25 000; ▪ Bare Point NSW 4519, 4520, 4522 Runs 1-6, Flown August-September 2000, Scale 1:50 000; ▪ Bathurst NSW 4438, 4439, 4446, 4447 and 4448 Runs 1-13 Flown 18.06.1998-29.08.1998 Scale 1:25 000; ▪ Bendemeer NSW 4350, 4353, 4355 & 4356 Runs 1-6, Flown 24.03.1997-05.03.1997 Scale 1:25 000; ▪ Bendemeer NSW , 4736 & 4737, Runs 1-13, Flown 03.01.2002-02.09.2002, Scale 1:50 000; ▪ Blackville NSW 4527, 4533, 4543, 4544 & 4545 Runs 1-13 Flown 12.10.2000-28.03.2001, Scale 1:25 000; ▪ Boggabri NSW 4574, 4575, 4577 & 4580 Runs 1-13 Flown 15.08.2001-17.09.2001, Scale 1:25 000; ▪ Bonalbo NSW 4358, 4359, 4360, 4361, 4366, 4367 & 4372, Runs 1-13, Flown April-August 1997, Scale 1:25 000; ▪ Bulahdelah NSW 4370, 4374 & 4375, Runs 1-13, Flown August 1997, Scale 1;25 000; ▪ Camberwell NSW 4479, 4480, 4494, 4495, 4496 & 4516, Flown May 1999-July 2000, Scale 1:25 000; ▪ Camden Haven NSW 4346 & 4347, Runs 1-13, Flown February-August 1997, Scale 1:25 000; ▪ Carrai NSW 4365, 4368 & 4369, Runs 1-13, Flown July

		– August 1997, Scale 1:25 000; ▪ Cessnock NSW 4514 & 4516, Runs 1-13, Flown July 2000, Scale 1:25 000; ▪ Coaldale NSW 4511, 4512, 4513 & 4519, Runs 1-13, Flown May-August 1997, Scale 1:25 000; ▪ Coffs Harbour NSW 4520, 4521 & 4523, Runs 1-4, Flown August-September 2000, Scale 1:50 000; ▪ Coolah NSW 4475, 4476, 4479, 4480 & 4490, Runs 1-13, Flown 25.03.1999-21.08.1999, Scale 1:25 000; ▪ Cowarral NSW 4357, 4569 & 4370, Runs 1-13, Flown April-August 1997, Scale 1:25 000; ▪ Curlewis NSW 4446 Runs 1-13 Flown 24.08.1998 Scale 1:25 000; ▪ Dorrigo NSW 4197, 4198 & 4200, Runs 1-13, Flown May 1994, Scale 1:25 000; ▪ Dorrigo NSW 4520, 4521 & 4523 Runs 1-7, Flown August-September 2000, Scale 1:25 000; ▪ Drake NSW 4496, 4498 & 4499, Runs 1-13, Flown October 1999, Scale 1:25 000; ▪ Dungog NSW 4479, 4480, 4493, 4494 & 4495, Runs 1-13, Flown May-October 1999, Scale 1:25 000; ▪ Ebor 4559 & 4560, Runs 1-13, Flown May 2001, Scale 1:25 000; ▪ Ellerston NSW 4561, 4562, 4567 & 4573, Runs 1-13, Flown May-August 2001, Scale 1:25 000; ▪ Glen Innes NSW 4521, 4526 & 4555, Runs 1-13, Flown August 2000-May 2001, Scale 1:25 000; ▪ Grafton NSW 4229 & 4531, Runs 1-7, Flown August 1994, Scale 1:25 000; ▪ Grafton NSW 4519, 4520 & 4522, Runs 1-6, Flown August-September 2000, Scale 1:50 000; ▪ Guyra NSW 4554, 4555 & 4556, Runs 1-13, Flown May 2001, Scale 1:25 000; ▪ Gulgong NSW 4502, 4503 & 4505, Runs 1-13, Flown January-May 2000, Scale 1:25 000; ▪ Howes Valley NSW 4089, 4099, 4104, 4105 & 4108, Runs 1-13, Flown September 1992-February 1993, Scale 1:25 000; ▪ Kempsey NSW 4346, 4347 & 4348, Runs 1-13, Flown February 1997, Scale 1:25 000; ▪ Macksville NSW 4356 & 4357, Runs 9-13, Flown April-July 1997, Scale 1:25 000; ▪ Macksville NSW 4522, 4523 & 4525, Runs 1-6, Flown September 2000, Scale 1:50 000; ▪ Manilla NSW 4576, 4577, 4580 & 4581 Runs 1-13 Flown 06.09.2001-17.09.2001 Scale 1:25 000; ▪ Merriwa NSW 4458 & 4459, Runs 1-13, Flown November 1998, Scale 1:25 000; ▪ Molong NSW 4431, Runs 1-7, Flown 29.03.1998, Scale 1:50 000; ▪ Mount Lindesay NSW 4524, 4525 & 4528, Runs 4-7, Flown September-October 2000, Scale 1:50 000; ▪ Mount Pomany 4089, 4099, 4104 & 4105, Runs 1-10, Flown October-November 1992; ▪ Mudgee NSW 4501 & 4505, Runs 1-4, Flown January-

		April 2000, Scale 1;25 000; ▪ Murrurundi NSW 4532, 4533, 4539, 4540 & 4544, Runs 1-13, Flown December 2000-March 2001, Scale 1:25 000; ▪ Muswellbrook NSW 4440, 4449 & 4451, Runs 1-13, Flown July-September 1998, Scale 1:25 000; ▪ Nambucca NSW 4357 & 4366, Runs 9-13, Flown April-July 1997, Scale 1:25000; ▪ Nambucca NSW 4522 & 4523, Runs 1&6, Flown September 2000, Scale 1:50 000; ▪ Newcastle NSW 4534, 4535 & 4562, Runs 1-13, Flown January-June 2001, Scale 1:25 000; ▪ Newton Boyd NSW 4358, 4366 & 4367, Runs 1-13, Flown April-August 1997, Scale 1:25 000; ▪ Nundle NSW 4352, 4353, 4354 & 4355 Runs 1-13 Flown 20.03.1997-25.03.1997 Scale 1:25 000; ▪ Nundle NSW 4742, 4743, 4745, 4746 & 4747 Runs 1-13, Flown 13.09.2002-21.09.2002 Scale 1:25 000; ▪ Orange NSW 4438, 4439, 4446, 4447 and 4448 Runs 1-13 Flown 18.06.1998-29.08.1998, Scale 1:25 000; ▪ Parkes NSW 4591, 4592, 4593 and 4721 Runs 1-7, Flown 28.12.2001-05.03.2002 Scale 1:50 000; ▪ Port Stephens NSW 4535 & 4562, Runs 1-8, Flown January-June 2001, Scale 1:25 000; ▪ Tambar Springs NSW 4434 & 4435 Runs 1-7 Flown 06.04.1998-10.05.1998 Scale 1:50 000; ▪ Tamworth NSW 4442 Runs 1-13 Flown 01.08.1998 Scale 1:25 000; ▪ Tenterfield NSW 4510 & 4512, Runs 1-13, Flown May-June 2000, Scale 1:25 000; ▪ Upper Manning NSW 45461, 4563 & 4573, Runs 1-13, Flown May-August 2001, Scale 1:25000; ▪ Warwick NSW 4496 Runs 1-7, Flown October 1999, Scale 1:25 000; ▪ Wingham NSW 4373 & 4375, Runs 1-13, Flown August 1997, Scale 1:25 000; ▪ Woodburn NSW 4544 & 4557, Runs 4-7, Flown May 2001, Scale 1:50 000; ▪ Yarrowitch NSW 3687, 3727 & 3732, Runs 1-11, Flown September 1989 – April 1990, Scale 1:25 000; ▪ Yarrowitch NSW 4352, 4353, 4354 & 4356 Runs 1-13, Flown March-April 1997, Scale 1:25 000. Patterns and spectral signatures in the Landsat 7 imagery, which comprise band combinations of 453 RGB multispectral merged with 12.5 metre pixel panchromatic provide specific recognition of a range of agricultural activities, namely cereal and fodder cropping, vegetable production (mostly potatoes), sugar cane and mature tree plantations. For other land use features such as newly established plantation (softwood, hardwood, tea-tree), intensive animal industries, farm dams, fish farms, extractive industries and coastal features including previously mined areas, barrier dunes, swamps and estuarine marshes, the main data sources are the aerial photographs, supplemented by field checking and local knowledge.

		For the Bonalbo, Coaldale, Woodburn, Bare Point, Grafton, Dorrigo, Coffs Harbour, and part of the Macksville 1:100 000 map sheets, land use data from an existing data set was plotted onto the 2000 satellite imagery. This data set carries the title of 'Land Condition'. The land use data are based upon 1990-1 aerial photography and field checking between in 1997 and 2000. Land use classes were updated using the most recent aerial photography, the satellite imagery and land use data from other DIPNR data sets. In some areas, the data are remapped to conform to ALUM standards. The DIPNR spatial database for Property Agreements and Management Contracts was used to identify the class 'other conserved areas' which are primarily private conservation agreements (Class 1.1.7). The same database for Clearing Consents was used to identify areas recently cleared and planted to softwood, hardwood or tea-tree in a well-defined plantation. The spectral signatures in the satellite imagery for these areas is the same as cultivated areas (if completely bare), grassland or young woody vegetation. Aerial photographs taken in 2000 or thereafter are used to confirm a satellite pattern that indicated the plantation is established. Irrigation developments were identified from an existing DIPNR data set being prepared by staff at Inverell Resource Centre and Albury. Foreshore lands adjoining major dams and owned and managed by DIPNR are identified from existing data held by the department. Local knowledge isused for specific commodity types in orchards or on cultivated lands, specialised industries such as plant nurseries, local urban features and crops grown under irrigation. Local information is obtained from the following sources: ▪ district DIPNR and Landcare officers ▪ local landholders ▪ officers of NSW Agriculture ▪ rural extension officers and/or managers with private stock and station agencies at Coolah, Dunedoo and Moonbi ▪ internet advertising for specific industries and districts. Field verification is carried out after the interpretation of the satellite imagery and aerial photographs. This is designed to confirm specific land uses such as: ❑ rural residential lands ❑ effluent disposal systems ❑ vineyards, orchards, truffle plantings and olive groves and if they are irrigated on a permanent basis ❑ specific commodity types in orchards ❑ dairies and poultry sheds ❑ eucalyptus oil plantations

		❑ fish and yabby farms ❑ evidence of previous cropping activities using the presence of stubble as an indicator ❑ pasture improvement activities. As part of the checking process a number of landholders are interviewed to provide further checks on the land use classification. ***Decision Rules*** ❑ In this project, the date of the land use data set is set as the date of the satellite imagery. The patterns and shapes of land use activities shown in the satellite imagery set the boundaries of the land use classes. Where the aerial photography post-dates the satellite imagery, specialised industries such as poultry farms and horticultural blocks that are newly established are determined by the date of photography; ❑ A number of dairies are still in production in the project area. They were confirmed during the field inspections. The currency of this land use class is therefore set at the date of field inspection. Dairies are not visible in the satellite imagery and the older aerial photographs of 1998 are not reliable, even for 2000, as many dairies have ceased production over the last few years. Gate notices for tankers are the easiest way to confirm that the dairies are still producing. ❑ Mapping of remnant native vegetation raises particular problems because of the differing perceptions of such terminology to potential users of the data. For this project, a number of criteria have been used to distinguish the different categories of native vegetation. Blocks of trees where the canopy cover is greater than 50% are classified as 'grazing modified pastures' when the following circumstances apply: ❑ the blocks are less than 100 ha in size and occur within a paddock or landscape where clearing is widespread ❑ the sites are not fenced allowing livestock to move at random into the forested areas ❑ tracks leading to or within the blocks can be observed ❑ the blocks were previously burned or cut over and may now include extensive regeneration ❑ dams have been constructed within these blocks as watering points for livestock ❑ there is a complete absence of lower canopy and understorey species and ground litter. Blocks of trees where the canopy cover is greater than 50% are classified as 'remnant native cover' when the following circumstances apply: ❑ the blocks are greater than 100 ha in size

		❑ there is no apparent disturbance of the site, either by burning or previous logging, cutting over or thinning ❑ the crowns of the trees are large and mature ❑ very steep, broken or rocky terrain, offering very low to nil grazing capacity ❑ absence of constructed dams ❑ it is part of a contiguous unit classified as a forest or National Park. Sites less than 100 ha in size are classified as 'remnant native cover' if field observations confirm that the understorey and ground cover species and/or ground litter are intact, with relatively low levels of disturbance.
	Positional Accuracy	50 metres for the original DIPNR mapping.
	Attribute Accuracy	Independent officers of DIPNR validated the original mapping and classification of polygons. These officer have more than 20 years experience in land use classification techniques. Data were verified by checks of the satellite imagery and aerial photographs. The verification was done between June and October, 2002. The overall accuracy of the mapping ranges from 92-99%. Once the data are converted into digital format, additional checks are undertaken to validate the data.
	Logical Consistency	All lines and polygons are tagged. Topological consistency is performed as part of the quality assurance procedures using ArcInfo.
	Completeness	The majority of land uses are described to the tertiary level with some description at secondary level for approximately 25 percent of the total survey area
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	Contact Position	Project Manager – Keith Emery Natural Resource Officer (Landuse) – Nick Sharp
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Metadata Date	Metadata Date	25 July 2003
Additional Metadata	Additional Metadata	The attached table (Table 2) lists the land use mapped as part of the project and shows the LUMAP, SCALD and ALUM classes for each land use type.

Additional data Recorded on Individual 1:100 000 Map Sheets

Name of 1:100 000 Map Sheet	Number of 1:100 000 Map Sheet	Additional Data Sets Recorded		
		Woody Vegetation (Structural Formation Classes down to 20%)	Irrigation Development	Evidence of Previous Cropping Patterns
Armidale	9236	√		
Bare Point	9538			
Bathurst	8831			
Bendemeer	9136	√		
Blackville	8934			
Boggabri	8936		√	√
Bonalbo	9440			
Bulahdelah	9333			
Camberwell	9133			
Camden Haven	9434			
Carrai	9336	√		
Cessnock	9132			
Coaldale	9439			
Cobbora	8733			
Coffs Harbour	9537			
Coolah	8834			
Cowarral	9335			
Curlewis	8935		√	√
Dorrigo	9437			
Drake	9340	√		
Dungog	9233			
Ebor	9337	√		
Ellerston	9134			
Euchareena	8732			
Glen Innes	9238			
Grafton	9438			
Guyra	9237	√		
Gulgong	8833			
Howes Valley	9032			
Kempsey	9435			
Macksville	9436			
Manilla	9036			√
Merriwa	8933			
Molong	8631			
Mount Lindesay	9441	√		
Mount Pomany	8932			
Mudgee	8832			
Murrurundi	9034			
Muswellbrook	9033			

Nambucca	9536			
Newcastle	9232			
Newton Boyd	9338	√		
Nundle	9135			
Orange	8731			
Parkes	8531		√	
Peak Hill	8532			
Port Stephens	9332			
Tambar Springs	8835			√
Tamworth	9035			
Tenterfield	9339	√		
Upper Manning	9234			
Warwick	9341	√		
Wellington	8632	√		
Wingham	9334			
Woodburn	9539			
Yarrowitch	9235			

Table 1: DIPNR Land Use Classification: LUMAP Mapping Codes/SCALD Land Use Codes/ALUM Land Use Codes. Fourteenth Edition: 17th April 2003.

LUMAP Mapping Code	Additional Codes	Land Use Class	SCALD Land Use Code	ALUM Land Use Code Version 4
		Cropping		
1		cropping – continuous or rotation	a0a	3.4.0
	code I if irrigated	cropping – continuous or rotation	a0c	4.4.0
84		fodder cropping such as oats	a0d	3.4.3
	code I if irrigated	fodder cropping	a0d	3.4.3
40		rice	a0a	3.4.1
	Code I if irrigated		a0c	4.4.1
		Horticulture		
2		horticulture – orchard	b1a	3.5.1
	code I if irrigated		b1a	4.5.1
3		horticulture – vineyard	b1b	3.5.4
	code I if irrigated		b1b	4.5.4
35		horticulture – eucalypts for cut flower arrangements	b1g	3.5.0
37		horticulture – seed production, including clover seed	b1f	3.6.0
42		nursery	b1d	5.1.0
53		building associated with horticultural industry (winery, packing shed)	b1h	5.3.0
38		olives	b1a	3.5.2
	Code I if irrigated			4.5.2.
39		vegetables	b1c	3.6.4
	Code I if irrigated			4.6.4
81		shade house (includes hydroponic use)	b1.	5.1.1
87		abandoned orchard and vine lands; trees/vines not maintained and may be dying; regrowth of native shrubs and trees is occurring	b1.	1.3.4
102		bananas	b1a11	3.5.1
	Code I if irrigated			4.5.1
104		pecan, macadamia and other nuts	b1a14	3.5.3
	Code I if irrigated			4.5.3
88		turf farming	a0e	4.3.0
89	Code I if irrigated	bulb production for flower trade	b1.	4.5.6
111		grassed area(eg mown/slashed grass area) within a vineyard	c2b	3.0.0
116		cut flowers	b1c	3.6.3
	Code I if irrigated		b1c	4.6.3
118		vineyard with residential facilities scattered amongst plantings (hobby, retreat or tourist feature)	b1c	3.6.3.
	Code I if irrigated		b1c	4.6.3
120		eucalyptus oil plantation	b1.	3.5.0
126		Truffle production	b1i	3.5.0
	Code I if irrigated		b1i	4.5.0
Grazing				
4	if tree cover is greater than 20%, describe by crown separation ratio: TS, TM or TD	grazing – volunteer, naturalised or improved pasture	c2b	3.3.1

LUMAP Mapping Code	Additional Codes	Land Use Class	SCALD Land Use Code	ALUM Land Use Code Version 4
5		grazing – improved perennial pasture	c2c	3.3.1
6		grazing – irrigated pasture	c2f	4.3
48	W	lantana infestations; total surface area of ground cover by lantana	c2i^^d	1.3.4
83		degraded land (salt site, eroded area)	nsg	1.3.4
101		secondary grassland. This is a combined land use/land cover feature to describe clearing of an isolated area or woody vegetation in a forest with little or no further activity such as grazing or logging. Woody regeneration is not evident and grasses herbs or forbs dominate the site.	c2b	3.3.1
117		wide road reserve (excluding road pavement) or TSR with some grazing	j9c	1.3.2
125		Salt treatment or salt demonstration site	f5j	1.3.4
134		flood refuge (constructed feature located within a flood prone area)	j9f	1.3.4
Mining & Quarrying				
7		quarry	e4a	5.8.2
43		derelict mining land	e4h	1.3.4
44		mining site	e4a	5.8.1
49		restored mining lands, both open cut and pit operations	e4f	1.3.4
78		fly ash dam/spoil dump	e4b	5.8.3
82		grassland within mining lease	e4.	1.3.4
95		restored sand mining area	e4f	1.3.4
114		conveyor belt	e..	5.8.0
133		stock pile of material located remotely from a mine site. Often situated next to a railway line or at a port	e4b41	5.8.3
Water Body				
8		farm dam	f5g	6.2.0
34		fish, prawn farm	d3e	5.2.0
46		reservoir	f5g	6.2.1
58		foreshore land to DLWC dam	j9q	1.2.2
59		foreshore or reserved land to water supply dam (Sydney Water, Hunter Water or Public Works Dam)	j9r	1.2.2
64		beach	f5n	5.5.3
80		water supply pressure reservoir	f5g	6.2.1
85		temporary water storage area (eg rice farming –opportunistic storage of water	f5.	6.2.0
86		inland salt lake	f5.	6.1.0
91		evaporation basin	f5j	6.2.3
96		sand spit/estuarine sand island	f5n	6.6.0
105		coastal lake	f5a	6.6.0
106		estuarine waters	k0o	6.6.0
123		ancillary (saddle) wall to reservoir (constructed separate to main wall and used to impound surcharge waters)	f5g	6.2.1
132		irrigation dam	f5g	6.2.0
150		training facility for marine pilots	f5c	5.5.0
Tree Cover				

9	Code A for State Forest	native forest	g6a	2.2
	Code B for areas outside State Forest		g6a	1.3.3

LUMAP Mapping Code	Additional Codes	Land Use Class	SCALD Land Use Code	ALUM Land Use Code Version 4
10	Code A for State Forest	native forest - logged	g6b	2.2
	Code B for areas outside State Forest		g6b	2.2
11	Code A for State Forest	native forest – regeneration	g6j	1.3.4
	Code B for areas outside State Forest		g6j	1.3.4
13	Code A for State Forest	native forest – filter strips in softwood plantation	g6z	1.3.3
	Code B for areas outside State Forest			1.3.3
14	Code A for State Forest	softwood plantation	g6e	3.1.2
	Code B for areas outside State Forest		g6e	3.1.2
	I - irrigated	irrigated softwood	g6w	4.1.2
15	Code A for State Forest	softwood plantation – nursery	g6x	
	Code B for areas outside State forest		g6x	3.1.3
24	Windbreak/Tree Corridor	Linear feature, usually residual stands of native species found along Crown roads or road reserves.	g6c	3.2.2
25	Treelot	Planted stands or corridors of native or exotic species. Mostly linear features along fence lines, but can include areas planted for gully stabilisation. May be or varying ages from recently established to mature	g6d	3.2.1
30		riparian vegetation – exotic species(principally willows)	g6l	6.3.0
41		hardwood plantation	g6g	3.1.1
	Code A for State Forest		g6g	3.1.1
52		poplar plantation	g6p	3.1.0
66		recently burnt areas (of woody vegetation)	g6n	1.3.3
67		native woody shrub	g6t	1.3.3
69		native shrub plantation (eg tea tree)	g6o	3.5.0
70		woodland	g6k	3.3.1
68		recently cleared land (cleared of forest vegetation, as yet not covered by crop or pasture	g6m	3.3.1
110		forest dominated by camphor laurel	g6l	1.3.4
137		firebreak	c2a	3.0.0
Urban				
16		urban – industrial/commercial	h7a	5.5.0
17		urban – residential	h7b	5.4.1
18		urban – rural residential	h7e	5.4.2
29		sewage disposal ponds	j9k	5.9.5
	I - irrigated	for areas irrigated from sewage effluent	c2f08	5.9.5
31		urban - recreation	i8c	5.5.3
32		defence facility	j9l	5.5.4
33		landfill	h7g	5.9.2
36		aerodrome/airport	j9j	5.7.1
45		airstrip (local/farmer, not sealed)	j9n	5.7.0
50		cemetery	j9g	5.5.0
61		research facility	h7.	5.5.5
75		tourist development, convention site	i8d	5.5.3
72		trig station or beacon	j9h	5.7.5

77		university & other tertiary institutions	h7.	5.5.2
92		government facility – gaol, training centre, school	h7.	5.5.2
94		caravan park, mobile home village	h7d	5.4.0
LUMAP Mapping Code	**Additional Codes**	**Land Use Class**	**SCALD Land Use Code**	**ALUM Land Use Code Version 4**
103		communications facility	j9h	5.7.5
115		urban –rural residential within vineyard	h7e	5.4.2
130		rural recreation - blocks are isolated and not associated with an urban area	i8b	5.5.3
135		saleyard	h7a	5.5.1
149		resort style private land use	i8d	5.5.0
151		hobby farm	h7e	5.4.2
152		small to medium forested blocks with isolated residential buildings. Rural residential but the forested feature of the block is worth noting	h7e	5.4.2
Power Generation				
93		electricity substation	j9.	5.6.1
112		electricity generation (power station and associated stockpiles, hydro-electric plants)	j..	5.6.0
113		land controlled a power company, currently unused or lightly grazed	c2b	5.6.0
127		green power site (eg wind turbines)	c2b90	5.6.1
153		disused power station	j..	5.6.1
Transport				
19		road/road reserve	j9c	5.7.2
20		railway	j9d	5.7.3
47		energy corridor	j9a	5.6.0
100		marina	f5d	5.7.4
Wetland				
21		floodplain swamp – backswamp	k0a	6.5.1
22		floodplain swamp – billabong	k0b	6.5.1
23		swamp	f5l	6.5.1
54		mangrove	g6q	6.6.0
55		mudflat	f5o	6.6.0
56		coastal marsh	k0o	6.5.0
73		wetland – dunal swamp	k0j	6.5.1
74		floodplain swamp	k0b	6.5.1
76		lagoon	f5.	6.5.0
98		aquaculture – oyster spoil & sheds, but not actual submerged lease	d3e	6.6.3
122		constructed wetland for conservation or water quality improvement	f5.	6.2.0
124		effluent pond(s) from intensive animal industries	f5i	6.2.4
Intensive Animal Production				
26		intensive animal production	d3	5.2.0
60		abattoir	h7a	5.3.0
62		irrigation from abattoir & other industries	f5i	5.9.0
90		horse stud and/or horse breeding facility	d3	5.2.0
Conservation Area				
27		private conservation agreement	j9o	1.1.7
99		foreshore protection – vegetated foredune	f5	1.2.4

LUMAP Mapping Code	Additional Codes	Land Use Class	SCALD Land Use Code	ALUM Land Use Code Version 4
River and Drainage System				
12		river, creek or other incised drainage feature. Includes the bed and bank of a river system and any adjoining riparian vegetation that overhangs the drainage feature or grows on the bank of the channel. Also includes vegetation growing on sand, gravel or clay deposits within the river channel	g6l	6.3.0
51		river training work	f5p	6.3.0
57		drainage channel	f5h	6.4.2
63		river navigation structure	f5c	6.3.0
65		river gravel deposit	f5m	6.3.0
71		flood or irrigation structure	j9f	6.3.0
79		drain	f5h	6.4.2
107		canal (eg canal estate, navigation canal)	f5c	6.3.0
108		river and riparian zone, where the river channel is filled by more than 50% of cumbungi or phragmites vegetation	g6l	6.3.0
119		constructed grass waterway for water disposal. Part of a soil erosion control system carrying run-off from graded banks	j..	1.3.4
121		drainage depression in cropping paddock	f5.	6.4.0
128		water supply channel (non irrigation system eg Sydney water supply channel)	j9q	6.4.1
131		flood chute (flood runner that is filled with water during and after a flood)	c2ew	6.3.0
136		irrigation supply channel	j9f	6.4.1
138		prior stream	c2a	6.3.0
Special Categories				
97		No identified use		1.3.4
109		cliff/rock outcrop	j9m	1.3.0
Unallocated Numbers				
Last number assigned 14.02.2003 - 124				
	Subscripts			
	I	areas irrigated at the time of mapping or field survey or at the date of the data source	see table above	see table above
	W	land where more than weeds now occupy 30% of the area. Principal weeds observed in the aerial photographs are bracken fern and blackberry. Even if the pastures are dominated by improved species, the unit is classified as Class 4 when the subclass 'W' is used, to indicate a loss of condition. When such weeds dominate the entire polygon, use the code 48W.	as per code defined by land use mapping code	as per code defined by land use mapping code

Q	existing, fixed irrigation infrastructure, not used at the time of mapping or field survey or at the date of the data source.	as per code defined by land use mapping code	as per code defined by land use mapping code
R	regeneration of woody plants (tree and shrub) is occurring. More than 30% of the ground area is covered by the shrub regrowth. However, a low to moderate grazing potential remains because the unit is dominated by pasture plants.	as per code defined by land use mapping code	as per code defined by land use mapping code
SR	regeneration of native shrub, such as Bursaria sp. or Cassinia sp. More than 30% of the ground area is covered by the shrub regrowth. Although often considered to be a weed, caution in the subscripts are advised because of the implications under the Native Vegetation Conservation Act	as per code defined by land use mapping code	as per code defined by land use mapping code
L	volunteer, naturalised, native or improved pastures with previous evidence of cultivation. This class is used if one of the requirements in mapping pastures is to indicate that a paddock is used in some type of rotation between cropping and grazing	as per code defined by land use mapping code	as per code defined by land use mapping code
Subscripts used for Mapping Code 26 (all lower case)			
c	poultry	d3b	5.2.4
d	dairy shed	d3a	5.2.1
p	piggery	d3a	5.2.5
r	deer	d3f	5.2.0
b	beef feedlot	d3c	5.2.2.
s	sheep		5.2.3
o	ostriches		5.2.0
h	horses		5.2.0