Catchment Scale Land Use of Australia – Commodities – Update December 2018

Description of contents of the data package

This document describes the GIS data, supporting files and GIS dataset attributes published in the data package for *Catchment Scale Land Use of Australia – Commodities –Update December 2018*. This data package is referred to as CLUMC in this document. Land use and commodities are classified according to the *Australian Land Use and Management (ALUM) Classification version 8*. All spatial data were produced using ESRI ArcGIS Pro 2.2. This data package complements the *Catchment Scale Land Use of Australia – Update December 2018* data package.

Not all commodities are captured consistently across Australia. Attribution depends on whether the land use mapper was able to capture the commodity accurately. Commodities which are captured consistently include avocados, bananas, cotton, dairy cattle, grapes, mangoes, macadamias, olives, sandalwood, sugar cane, pigs and poultry (primarily chickens).

Table 1 describes the principal file components of the data package. Table 2 is a data dictionary for the attributes of the CLUMC vector dataset. Table 3 is a summary of the commodities in the CLUMC dataset.

Table 1: Brief description of the contents of this data package.

File name	File description
CLUM_Commodities_2018.shp	CLUMC vector dataset of commodities as at December 2018. ESRI shapefile, coordinate system GDA94 / Geographic.
DescriptiveMetadata_CLUMC_December2018.pdf	Descriptive metadata for the *Catchment Scale Land Use of Australia – Commodities –Update December 2018* dataset.
DatasetDescription_CLUMC_December2018.pdf	This document, which describes the GIS data, supporting files and GIS dataset attributes published in this data package.
CLUMC_map_December2018_Broad_Type.pdf	Land use map showing the CLUMC dataset, based on broad commodity types. Map produced in landscape format, at A0 size (1189 millimetres by 841 millimetres), and suitable for printing at A3 size (420 millimetres by 297 millimetres).
CLUMC _map_December2018_Currency.pdf	Land use map showing the currency of the CLUMC dataset. Map produced in landscape format, at A0 size (1189 millimetres by 841 millimetres), and suitable for printing at A3 size (420 millimetres by 297 millimetres).

Table 2: Data dictionary for the attributes of the CLUMC vector dataset

Field name	Field description	Code values
FID	Internal feature number that uniquely identifies each polygon	Integer numeric value
Shape	Internal feature geometry ("polygon")	Geometry
Commod_dsc	Commodity description as a string. Examples: "bananas", "chickens", "bauxite"	Text, width 50
Broad_type	Broad classification of commodities as a string – "Animals", "Cereals", "Flowers and bulbs", "Forest", "Fruits", "Mines", "Nuts", "Oilseeds", "Other crops", "Pasture", "Pulses", "Vegetables and herbs".	Text, width 50
Source_yr	Year of mapping as an integer. Source_yr is equivalent to date in CLUM supporting polygon shapefile	Short integer
State	State abbreviation as a string	Text, width 5
Area_ha	Area of polygon in hectares	Float numeric value
LU_CODEV8N	ALUM v8 code as a three digit integer. First digit is primary code, second digit is secondary code, and third digit is tertiary code. Examples: 341 (3 "Production from dryland agriculture and plantations", 3.4 "Perennial Horticulture", 3.4.1 "Tree fruits")	Integer numeric value Range: 100 to 663

Field name	Field description	Code values
	523 (5 "Intensive uses", 5.2 Intensive animal production", 5.2.3 "Poultry farms")	
	581 (5 "Intensive uses". 5.8 "Mining", 5.8.1 "Mines")	
	LU_CODEV8N is equivalent to VALUE in CLUM raster dataset.	
Tertiary	ALUM tertiary code and description as a string.	Text, width 50
	Examples:	
	"1.1.1 Strict nature reserves"	
	"6.6.3 Estuary/coastal waters – intensive use"	
	TERTIARY_V8 is equivalent to TERTIARY_V8 in CLUM raster dataset	

Note: all ALUM codes refer to the Australian Land Use and Management Classification, version 8.

Table 3: Summary of CLUMC data by broad type and commodity

Broad type	Commodity	Number of polygons	Area of polygons (ha)
Animals		**57,416**	**58,228,547.41**
Animals	abalone	1	8.44
Animals	algae	1	634.96
Animals	alpacas	88	727.47
Animals	aquaculture	5	708.52
Animals	bees	25	648.76
Animals	buffalo	2	79.30
Animals	camels	1	4.40
Animals	cattle	5,809	56,584,821.40
Animals	cattle dairy	26,922	895,925.08
Animals	cattle meat	11,975	380,508.27
Animals	cattle stud	14	145.61
Animals	chickens	1,309	8,473.06
Animals	chickens eggs	47	674.45
Animals	chickens meat	522	13,177.07
Animals	crocodiles	9	110.12
Animals	crustaceans	3	495.51
Animals	deer	12	136.24
Animals	ducks	1	3.91
Animals	emus	2	4.71
Animals	finfish	9	134.02
Animals	geese	1	0.39
Animals	goats	22	171.82
Animals	goats dairy	2	9.55
Animals	grapes	1	32.23
Animals	horses	2,475	43,336.72
Animals	marron	3	767.14
Animals	molluscs	57	2,807.35
Animals	ostriches	3	47.77
Animals	pigs	956	17,727.68
Animals	poultry	1	0.18
Animals	sheep	6,987	272,283.38
Animals	sheep dairy	2	12.07
Animals	sheep meat	82	1,185.70
Animals	sheep stud	5	89.89

Broad type	Commodity	Number of polygons	Area of polygons (ha)
Animals	sheep wool	57	2,621.08
Animals	spirulina	1	11.08
Animals	turkeys	3	18.98
Animals	yabbies	1	3.11
Cereals		**1,540**	**64,220.95**
Cereals	barley	383	18,305.72
Cereals	maize	97	1,084.15
Cereals	oats	390	9,744.43
Cereals	rice	6	851.23
Cereals	rye cereal	18	311.65
Cereals	sorghum	3	51.16
Cereals	triticale	12	143.52
Cereals	wheat	631	33,729.09
Flowers and bulbs		**248**	**4,605.39**
Flowers and bulbs	australian native flowers	1	1.37
Flowers and bulbs	bulbs	2	0.43
Flowers and bulbs	cycads	13	27.31
Flowers and bulbs	flowers and bulbs	5	31.03
Flowers and bulbs	flowers and foliage	16	10.69
Flowers and bulbs	lavender	3	6.83
Flowers and bulbs	orchids	2	6.13
Flowers and bulbs	palms	25	26.31
Flowers and bulbs	pongamia pinnata	1	0.13
Flowers and bulbs	roses	14	60.71
Flowers and bulbs	tropical flowers	3	1.50
Flowers and bulbs	tulips	3	77.03
Flowers and bulbs	turf	160	4,355.93
Forest		**347**	**20,919.68**
Forest	bamboo	2	1.18
Forest	blue gum	3	45.45
Forest	christmas trees	12	118.31
Forest	eucalyptus oil	19	902.59
Forest	jojoba	7	224.65
Forest	lemon myrtle	11	26.27
Forest	mahogany	4	17.29
Forest	oil mallee	2	3,021.69
Forest	sandalwood	87	9,651.01
Forest	sawlogs	5	411.68
Forest	tea tree	195	6,499.55
Fruits		**43,146**	**304,246.07**
Fruits	apples	2,164	3,678.50
Fruits	apricots	644	565.86
Fruits	avocados	522	4,577.54
Fruits	babacos	1	0.26
Fruits	bananas	1,170	17,092.47
Fruits	belimbing	1	0.51
Fruits	blackberries	1	2.02
Fruits	blueberries	379	2,285.81

Broad type	Commodity	Number of polygons	Area of polygons (ha)
Fruits	caimito	6	20.29
Fruits	carambola	1	1.12
Fruits	cherries	309	1,670.42
Fruits	cupuscu	1	0.48
Fruits	custard apples	19	41.71
Fruits	dates	28	37.11
Fruits	dragon fruit	18	12.66
Fruits	durian	1	20.64
Fruits	figs	29	45.34
Fruits	grapefruit	46	86.93
Fruits	grapes	6,173	135,521.18
Fruits	grapes dried	3,275	3,425.22
Fruits	grapes table	6,753	8,281.03
Fruits	grapes wine	7,526	67,505.11
Fruits	guavas	5	20.64
Fruits	jackfruit	37	48.93
Fruits	jujube	1	1.11
Fruits	kiwifruit	21	114.38
Fruits	lemon	4	37.98
Fruits	lemons	99	301.44
Fruits	limes	37	67.68
Fruits	longan	1	0.20
Fruits	lychees	2	1.56
Fruits	macadamias	1	0.53
Fruits	mandarins	530	841.44
Fruits	mangoes	2,101	15,291.27
Fruits	melons	28	1,848.66
Fruits	moringa	1	0.91
Fruits	mulberries	1	1.50
Fruits	nashi pears	55	115.60
Fruits	nectarines	791	882.57
Fruits	oil palms	1	0.12
Fruits	olives	1,983	27,810.57
Fruits	oranges	2,188	3,232.67
Fruits	passionfruit	53	126.42
Fruits	pawpaws	12	16.47
Fruits	peaches	1,584	2,087.55
Fruits	pears	3,384	3,422.17
Fruits	persimmons	45	75.02
Fruits	pineapples	7	218.60
Fruits	pistachios	99	270.20
Fruits	plumcots	5	4.65
Fruits	plums	770	886.14
Fruits	pluots	33	44.52
Fruits	pomegranate	38	193.17
Fruits	quinces	7	16.14
Fruits	rambutans	34	40.13
Fruits	raspberries	3	0.84

Broad type	Commodity	Number of polygons	Area of polygons (ha)
Fruits	rhubarb	1	2.66
Fruits	sapodilla	1	0.14
Fruits	stone fruit	64	320.47
Fruits	strawberries	24	475.09
Fruits	tahitian limes	1	2.63
Fruits	tamarillo	2	38.77
Fruits	watermelons	24	510.93
Fruits	wax apple	1	1.38
Mines		**126**	**17,646.40**
Mines	bauxite	40	4,721.63
Mines	copper	1	50.28
Mines	diamonds	1	983.55
Mines	gas	1	17.93
Mines	gold	6	3,010.87
Mines	ilmenite	1	20.74
Mines	iron ore	4	3,077.89
Mines	manganese	69	4,388.09
Mines	uranium	1	1,319.53
Mines	zinc	1	12.84
Mines	zircon	1	43.05
Nuts		**4,760**	**47,464.89**
Nuts	almonds	2,832	26,207.35
Nuts	chestnuts	6	64.31
Nuts	hazelnuts	7	2,425.37
Nuts	macadamias	1,594	14,180.52
Nuts	pecan nuts	2	4.22
Nuts	pecans	228	1,648.59
Nuts	pistachio	1	25.71
Nuts	pistachios	6	408.89
Nuts	walnuts	83	2,489.38
Nuts	water chestnuts	1	10.55
Oilseeds		**77**	**3,504.20**
Oilseeds	canola	73	2,291.87
Oilseeds	chia	1	1,212.02
Oilseeds	jojoba	1	0.08
Oilseeds	safflower	1	0.10
Oilseeds	sunflower	1	0.12
Other crops		**5,142**	**927,144.11**
Other crops	alkaloid poppies	1	173.10
Other crops	cocoa	1	0.13
Other crops	coffee	90	270.15
Other crops	cotton	1,276	339,718.48
Other crops	hops	3	53.16
Other crops	pyrethrum	153	1,623.14
Other crops	sugar cane	3,612	585,269.94
Other crops	tea	6	36.00
Pasture		**430**	**2,450.19**
Pasture	alto panicum and mekong grass	1	28.04

Broad type	Commodity	Number of polygons	Area of polygons (ha)
Pasture	cavalcade	1	31.32
Pasture	lucerne	423	2,281.43
Pasture	pangola	2	20.63
Pasture	panicum	2	3.35
Pasture	rhodes grass	1	85.42
Pulses		**272**	**16,855.58**
Pulses	chickpeas	20	635.21
Pulses	field beans	25	917.45
Pulses	field peas	35	1,438.10
Pulses	lentils	152	12,879.23
Pulses	lupins	21	604.95
Pulses	vetches	19	380.65
Vegetables and herbs		**1,711**	**16,082.65**
Vegetables and herbs	artichokes	1	1.07
Vegetables and herbs	asparagus	164	442.76
Vegetables and herbs	beans	118	2,432.62
Vegetables and herbs	bitter melons	1	5.62
Vegetables and herbs	broccoli	1	6.44
Vegetables and herbs	cabbages	4	9.26
Vegetables and herbs	capsicums	2	10.66
Vegetables and herbs	carrots	235	3,517.99
Vegetables and herbs	cauliflowers	8	51.83
Vegetables and herbs	chicory	7	53.36
Vegetables and herbs	chillies	12	17.59
Vegetables and herbs	chinese cabbages	1	2.18
Vegetables and herbs	cucumbers	26	26.75
Vegetables and herbs	eggplants	6	16.07
Vegetables and herbs	garlic	1	0.74
Vegetables and herbs	herbs	2	3.14
Vegetables and herbs	leeks	1	6.08
Vegetables and herbs	lemongrass	2	1.24
Vegetables and herbs	lettuces	4	22.81
Vegetables and herbs	melons	78	179.71
Vegetables and herbs	mushrooms	7	35.34
Vegetables and herbs	okra	65	90.47
Vegetables and herbs	olives	1	126.82
Vegetables and herbs	onions	4	111.19
Vegetables and herbs	parsnips	3	8.16
Vegetables and herbs	peas	77	3,174.23
Vegetables and herbs	potatoes	86	2,990.39
Vegetables and herbs	pumpkins	11	110.16
Vegetables and herbs	rhubarb	1	1.30
Vegetables and herbs	spring onions	1	4.71
Vegetables and herbs	sweet corn	1	2.33
Vegetables and herbs	sweet potatoes	3	4.41
Vegetables and herbs	taro	1	1.32
Vegetables and herbs	tomatoes	18	800.12
Vegetables and herbs	truffles	4	162.70

Broad type	Commodity	Number of polygons	Area of polygons (ha)
Vegetables and herbs	vegetable seeds	1	3.07
Vegetables and herbs	vegetables	703	1,315.68
Vegetables and herbs	vegetables and herbs	42	310.24
Vegetables and herbs	zucchini	8	22.08
Grand Total		**115,215**	**59,653,687.53**

Note: This data should not be used as national statistics for the commodities listed.