

Metadata	Statement	
Category	Element	Description
Data Set	Title	Land Use, Tasmania
Custodian	Custodian	D.P.I.W.E. GIS Section
	Jurisdiction	Tasmania, Australia
Description	Abstract	A statewide coverage land use of Tasmania. Mapping priorities have been determined by diversity of land use. The areas of Tasmania most heavily used for agriculture are mapped at 1:25,000 scale, comprising the Northern Slopes, Northern Midlands, and South East IBRA5 Bioregions. The remaining areas are mapped at 1:100,000 scale. Version 5 of the Australian Land Use and Management (ALUM) is used to attribute the land uses.
	Search Word	Land Use, Land Use Mapping, Agriculture
	Geographic Extent Name	Tasmania
	GEN Category	Tasmania
	GEN Custodial Jurisdiction	Tasmania
	GEN Name	Land Use, Tasmania
	Geographic Extent Polygon	
	Geographic Bounding Box	
	North Bounding Latitude	-39.0
	South Bounding Latitude	-56.2
	East Bounding Longitude	165.2
	West Bounding Longitude	136.2
Data Currency	Beginning Date	2001
	Ending Date	2003
Dataset Status	Progress	Complete
	Maintenance and Update Frequency	Undetermined
Access	Stored Data Format	Genamap vector, Oracle database
	Available Format Type	Genamap, ArcInfo export
	Access Constraint	To be determined

Data Quality	Lineage	
		<p>The dataset was constructed by satellite image interpretation, air photo interpretation, and incorporation of ancillary data. SPOT satellite imagery was the primary spatial data source for most of the study area, mostly from the SPOT4 platform, providing 4 spectral bands with 20m resolution. A selection of 15 images was chosen for low cloud/haze, low sensor viewing angle, currency, and season. Cloud conditions necessitated the selection of images from a variety of dates, with most being more recent than January 2000. The exception was King Island, for which the most recent useable image was from February 1998, and from the SPOT 2 platform (3 bands). Air photos and orthophoto mosaics were used in a few areas where satellite imagery was cloudy. 1:20,000 or 1:42,000 high-resolution colour photos were used with caution, as many were from 1996 - 2000.</p> <p>Key ancillary data used in the project include -</p> <ul style="list-style-type: none"> • Tasveg vegetation mapping, comprising detailed forest and non-forest mapping at 1:25,000 scale no older than 5 years throughout Tasmania, and regularly updated. • Forest group type mapping from Forestry Tasmania and Private Forests Tasmania. • Local government planning schemes, except Clarence municipality • State cadastre. • State tenure. • Digital planning schemes. • Reserves mapping – August 2001. • Private Reserves • Digital topographic maps. • Mining lease maps - October 2001. • Marine farm location maps. • Viticulture location map. • Drainage digital map. • Road digital map. • Irrigation licence location, point data. • Dairy location, point data. • Tasmanian Agricultural Product Database (TAPDB) of grazing animals point data. <p>The project used the ALUM version 5 classification system, which was developed for land use mapping throughout Australia. Most features were only mappable to the "minimum level of attribution".</p> <p>Mapping guidelines stipulated that -</p> <ul style="list-style-type: none"> • Prime land use is determined on the basis of the primary management objective of the land manager • Land use classes should be allocated at a particular point in time (date of satellite imagery) • Areas should be assigned to irrigation if permanent infrastructure for irrigation is present. • Areas of vegetation likely to be grazed should be assigned to 2.1.0 (grazing natural vegetation) or 3.2.0 (grazing improved pasture) <p>Methodology</p> <p>Each land use map was created from pre existing digital data, with additional agricultural data added from satellite imagery</p> <p>The usual method was to create a new map from digital tenure layer and reclassify features within this map – Reserves, Rivers, State Forest, Hydro features etc. Add areas appropriate to ALUM category 5 (INTENSIVE USES). These are generally sourced from local government planning schemes. Add private timber reserves (PTR), private reserves (PRFA, PAOPL), vineyards, marine fishing zones and land based aquaculture sites, mining areas (either from visual inspection of imagery or from Mining Lease dataset), major vegetation features (remnant vegetation, grazing natural vegetation, from Tasveg and RFAforest mapping) and water features including rivers and dams (from drainage layer and imagery analysis). Finally additional plantations not represented as PTRs are added to each map.</p> <p>Initially maps were created with all these elements at the outset via the overlay operation in Genamap, generally resulting in significant time lost to data cleaning. Most maps were subsequently created by an overlay of tenure, PTRs, plantation and dams, and planning schemes, with vegetation and agricultural features digitised in last</p> <p>Satellite imagery for many mapsheets was plotted and sent to regional land management experts, who identified agricultural land use for ALUM categories 3 & 4. This data is then digitised onto each map and, voila, a land use map is completed.</p> <p><u>Limitations</u></p> <p>Only major highways have been mapped, unless they appear in Tenure layer or planning scheme. Only farm dams greater than 0.25 ha have been added, and only in areas mapped at 1:25 000.</p> <p>Rural residential areas have been added from planning schemes and occasionally from cadastre, and override any other land use features.</p> <p>Agricultural features have been mapped at the time of satellite imagery. Some fuzzy edge matching was required where adjoining satellite scenes were from different dates. The most recent scene was always used, unless its data was vastly inferior to an overlapping scene.</p> <p>Agricultural mapping is dependent on skills and experience of those attributing the images. Very little time has been available for additional field checking.</p> <p>Most cropping and horticulture has been mapped as irrigated, unless those doing the attributing specifically remember areas of dryland agriculture.</p> <p>Irrigated pastures are largely mapped as they appear on imagery.</p> <p>All areas of State Forest are mapped as either 2.2.0 (Production Forestry) or 3.1.0 (Plantation Forestry). Plantations within State Forests are poorly delineated, if at all, especially at 1:100 000 scale</p> <p>Separation of cropping from vegetable growing (perennial or seasonal horticulture) proved to be very difficult. Where difficulty occurred, they were mapped as cropping. (Such areas are likely to be in a rotation pattern anyway).</p> <p>Many orchards, especially new ones, are likely to have been missed.</p>

	Positional Accuracy	Generally within 20 metres. Satellite Images have been resampled to within 20m accuracy. Tasveg mapping has been estimated to be within 20m accuracy.
	Attribute Accuracy	Overall accuracy is 88.34%. Validation results based on 772 sample points collected in January 2003. Confusion mainly occurs between grazing improved pastures/grazing native grasses/grazing irrigated pastures/irrigated cropping/
	Logical Consistency	All lines and polygons are tagged. Adjoining mapsheets are systematically edge matched for attribute consistency and line connection
	Completeness	Completed
Contact Information	Contact Organisation	D.P.I.W.E. GIS section
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