



University of
Western Sydney

URBAN RESEARCH CENTRE

Land use changes in the Sydney Basin

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Overview

- Encroachment of agricultural lands
- Gaps in land use data
- Land use maps for Sydney Basin: results

Agricultural lands in the Sydney Basin

- **Encroachment**

- Agricultural trends in the Sydney Region. Gillesepe, P.D. 2003
- From the Outside looking in. The Future of Sydney's Rural Land. Sinclair, I.; Docking, A.; Jarecki, S.; Parker, F. and Saville, L. 2004
- Ground Truthing of the Sydney Vegetable Industry in 2008. Malcolm, P. and Fahd, R. 2009

Agricultural lands in the Sydney Basin

- SYDNEY AGENCIES DATA prior 2008
 - Vegetable farms > 2000 (5000 hec)
 - Sydney supplies > 80% veggies consumed in region
 - Value of industry: \$215 mill.
Employ>2000 FT workers
- 2008 DATA
 - DPI: Veg. farms: 1052 (2025 hec)
 - ABS: 85% veggies consumed Sydney come outside region
 - ABS: industry value \$103 mill.

Agricultural lands in the Sydney Basin

- Vegetable Farms (DPI,2009):
 - Number: 1052
 - Total area: 2025 hec
 - Area farm: 1.3 hec (outdoor field veg.)
 - Outdoor-field farms: 815
 - Greenhouses: 294
 - Outdoor- hydroponic farms: 54
- } 50% located in Proposed N and S Growth Centres
- **CONCLUSSION:**
 - **Sydney Vegetable Industry is Shrinking**
 - ABS 2008 Data is representative and accurate.

Agricultural lands in the Sydney Basin

The Sydney Morning Herald

smh.com.au

MONDAY, OCTOBER 12, 2009

NEWS 7

Suburbs will swallow Sydney's market gardens

Debra Jopson
REGIONAL AFFAIRS

MORE than half of the vegetable farms in the Sydney region are set to disappear because they are in the southern and north-western growth areas that the NSW Government has earmarked for suburban development over the next two decades, a departmental report has found.

There are just 1050 vegetable farms left in the Sydney basin - half the 2000 that some com-

mentators had suggested - and the number continues to fall, says the report by Peter Malcolm and Riad Fahd, of the NSW Department of Industry and Investment.

They recommend a review of the Sydney vegetable industry to consider whether it should be encouraged to expand so that the metropolis becomes more self-sufficient in produce.

"Because Sydney imports the bulk of its vegetables from outside the region many Sydneysiders, feeling increasingly con-

cerned about the issues of food security, food miles and the carbon footprint of imported vegetables compared with locally produced vegetables, may wish to develop strategies to improve the city's self-sufficiency in vegetable production," they say.

There should be a full carbon life-cycle assessment of vegetables grown in the NSW regions and interstate, compared with the same crops produced in Sydney greenhouses, they recommend. But they stress that

Australia now imports more vegetables than it exports.

Sydney is self-sufficient in mushrooms, cabbages and lettuce, but analysis of Australian Bureau of Statistics figures shows that some commentators may be wrong when they say that the metropolis gets most of its celery, capsicum and chillies locally, the researchers say.

The researchers used a sophisticated mix of wireless technology, global positioning systems and satellite imagery verified by

checking on the ground to get the most accurate picture yet of the size and importance of the Sydney vegetable industry, which is home to about half of

the state's vegetable farms.

"The overwhelming impression was that the Sydney vegetable industry is shrinking," says the report, funded by the department and Horticulture Australia Ltd. It now occupies 2025 hectares, much less than the 5000 hectares documented in two reports six years ago.

"Anecdotal evidence from many industry observers also suggests that the vegetable industry, not only in Sydney but also in Gosford and the Hunter Valley, has shrunk dramatically over the last 20 years," it says.

The Sydney turf industry has about 1800 hectares planted in grass for lawns and parks, an area similar to the land used for outdoor vegetable crops. "Many of these turf farmers are ex-vegetable farmers who, if given the appropriate incentives, could

easily switch back to growing vegetables," the report says.

The 603 hectares devoted to vegetables in the south-west and north-west growth areas, about 52 per cent of Sydney's farms, are likely to disappear, the researchers say. And the area devoted to greenhouse vegetables could decline by as much as 60 per cent when these areas are developed.

Some communities, such as the Cambodian growers who farm rented land, may have to disperse or cease production, they warn.

Hospital wages rise above the flat line

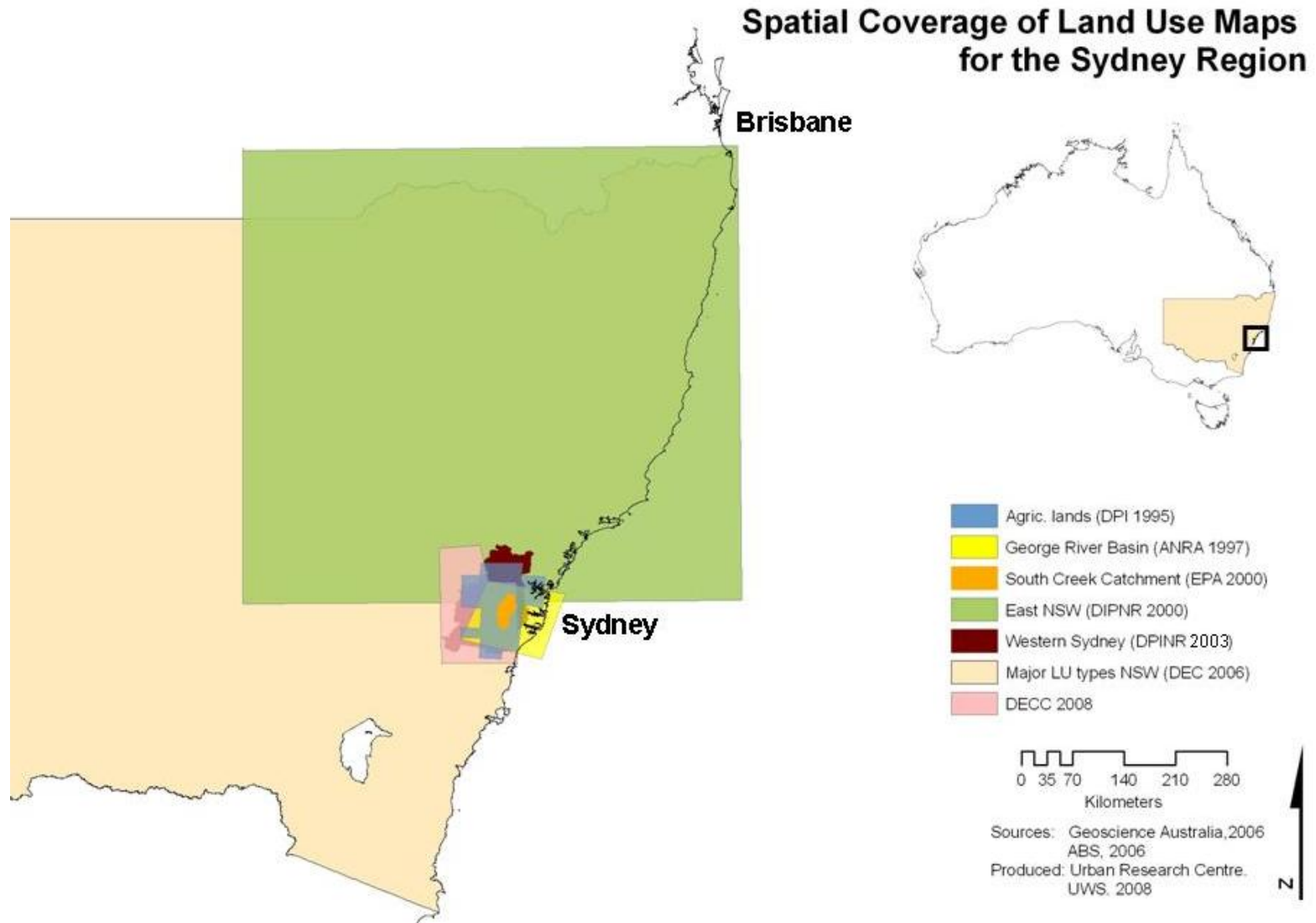
Natasha Wallace
HEALTH

AFTER a four-year battle, emergency doctors have begun receiving a 25 per cent wage increase worth up to \$60,000 a year per person, at a cost of about \$40 million to the Health Department.

The Herald understands the former NSW health minister John

- **NEED:** Consistent tools and good quality data for sustainable planning: LU maps

Land Use Data in the Sydney Basin



Land Use maps for the Sydney Basin

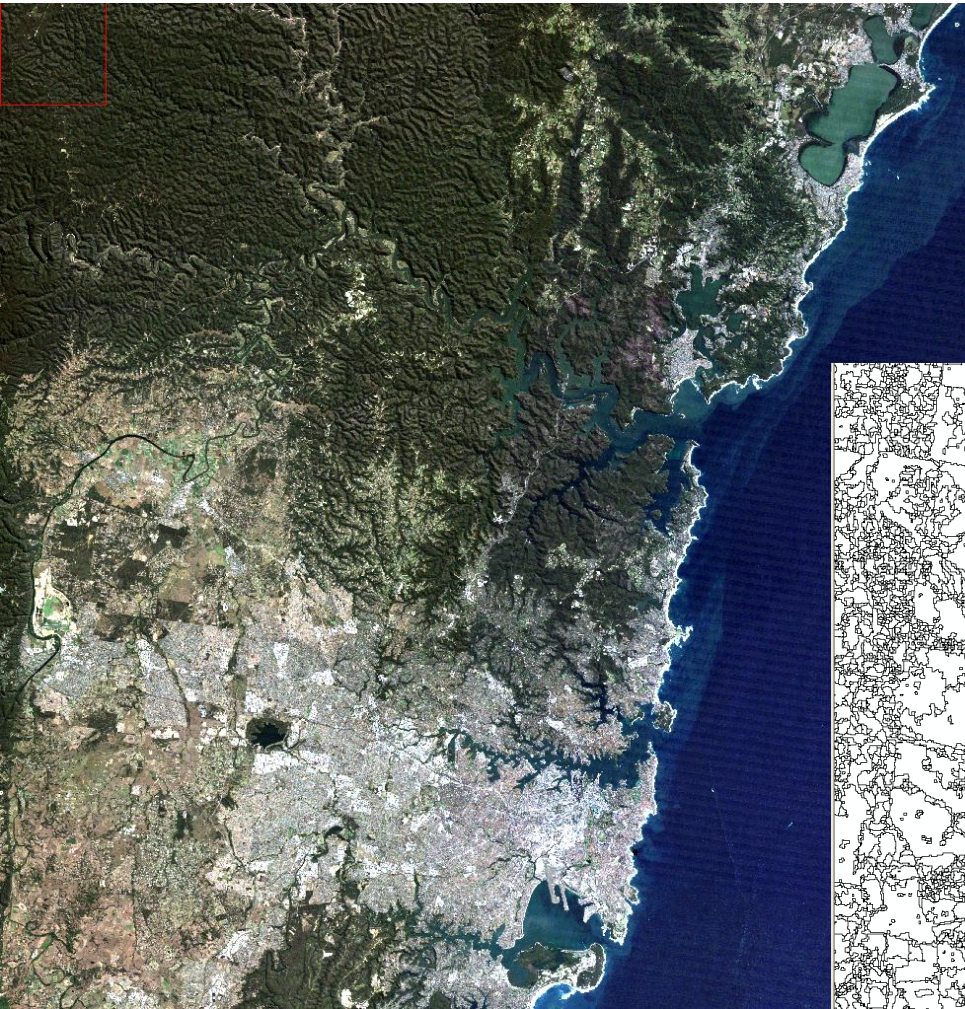
- Our research: Automated RS image analysis
 - 2006 Satellite imagery: 30m spatial resolution
 - Computer aid LU classification (training)
 - Field validation
 - = LU map of Sydney Basin

Allows go back in time and track LU changes (planning capabilities)

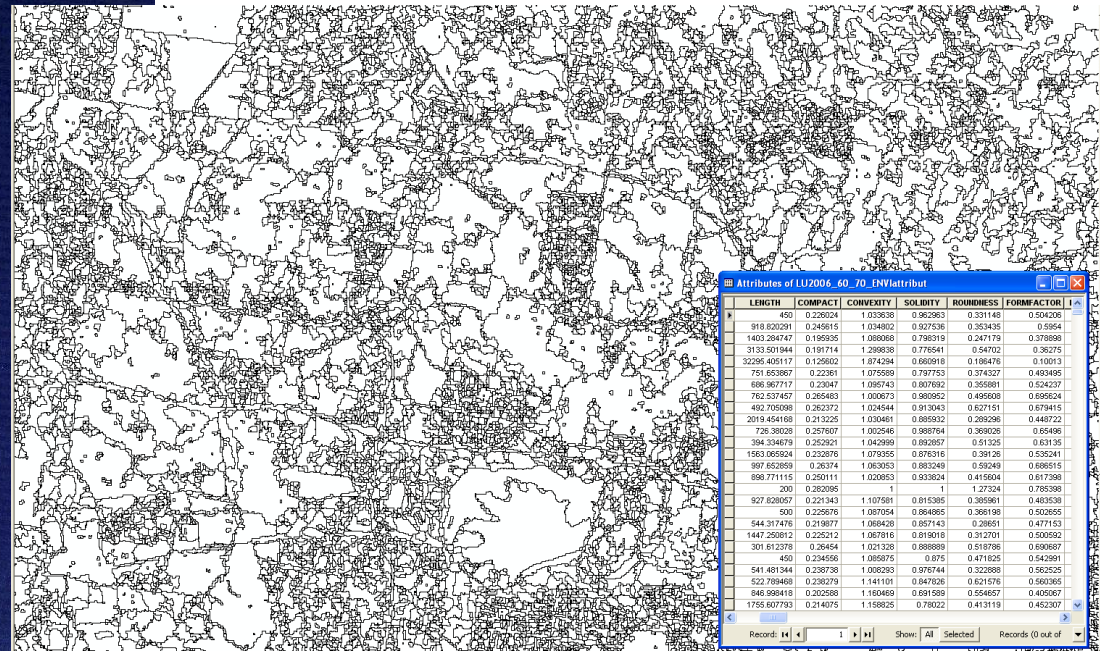
Save time and ease coherent reproducibility

- Good for detection of general agric. areas
- Fails to depict specific agric. classes
 - Needs imagery at higher resolution: FUTURE RESEARCH

- Satellite imagery
(30 m resolution)



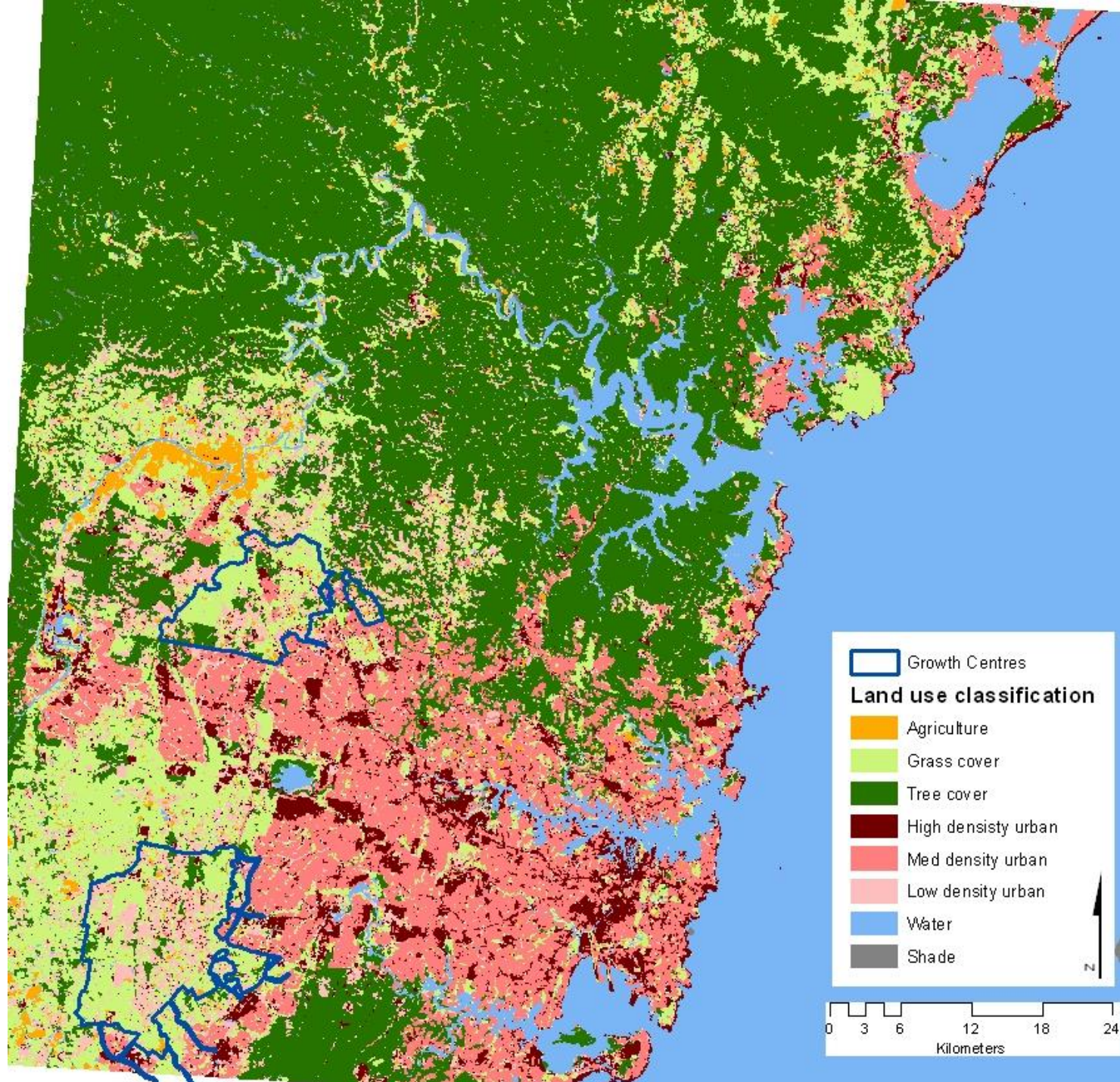
- Computer training sites
- Automated computer aid classification



Attributes of LU2006_60_70_FWIattribut

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1403 284747	0.195935	1.080068	0.798319	0.247179	0.378998	
3133 501844	0.191714	1.299838	0.778541	0.54702	0.36275	
32296 405117	0.125002	1.874296	0.860918	0.198476	0.10013	
751 653867	0.22261	1.075589	0.797753	0.374327	0.493495	
686 967717	0.23047	1.095743	0.907692	0.355881	0.524237	
763 537457	0.365463	1.030073	0.989952	0.495608	0.665604	
482 705986	0.262372	1.024544	0.913043	0.627151	0.679415	
2019 454168	0.213225	1.030461	0.88932	0.289296	0.448722	
726 38028	0.257607	1.002546	0.988794	0.369026	0.65496	
394 234679	0.252021	1.042999	0.852697	0.51225	0.63126	
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1447 250612	0.225212	1.067816	0.819018	0.312701	0.500592	
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490	0.234556	1.085875	0.875	0.471625	0.542981	
541 481344	0.287387	1.006293	0.978744	0.322888	0.562526	
522 789468	0.239279	1.141101	0.847626	0.621576	0.590365	
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1785 607793	0.214075	1.158825	0.788022	0.413119	0.452307	

Records: 14 | 1 | Show: All Selected | Records 0 of out of



Thanks for your kind attention

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