Public Land @ 5 Million conference

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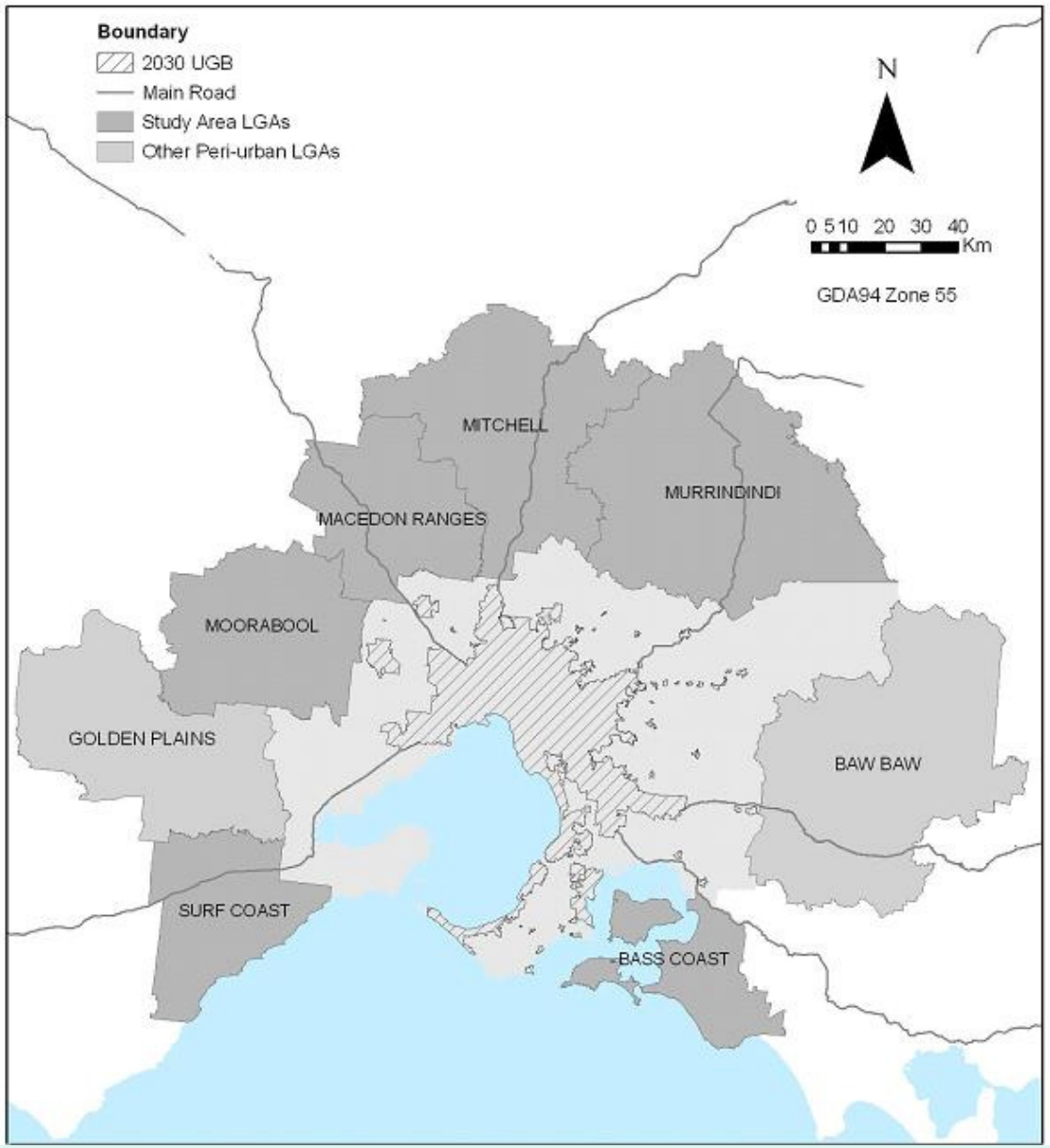
Definition of peri-urban

- The peri-urban zone: that area of land extending from the metropolitan edge to large scale agricultural land
- Neither fully urbanised nor completely rural, but often seen as a “middle band” of land with particular characteristics
- In fact, a disorderly mosaic of different uses – important significant agricultural production

Inner and outer Melbourne peri-urban areas



Peri-urban region

- Region has distinctive social, physical, economic, natural resource features and special needs
- Protecting and enhancing these critical for the region's and Melbourne's economic future as a city in touch with its hinterland
- This requires regional plans and policies: despite some regional investigations, *Melbourne 2030* not a truly regional plan

Key drivers of change

- **Global mega-drivers** (trade; communications; trends in production, consumption; work patterns etc)

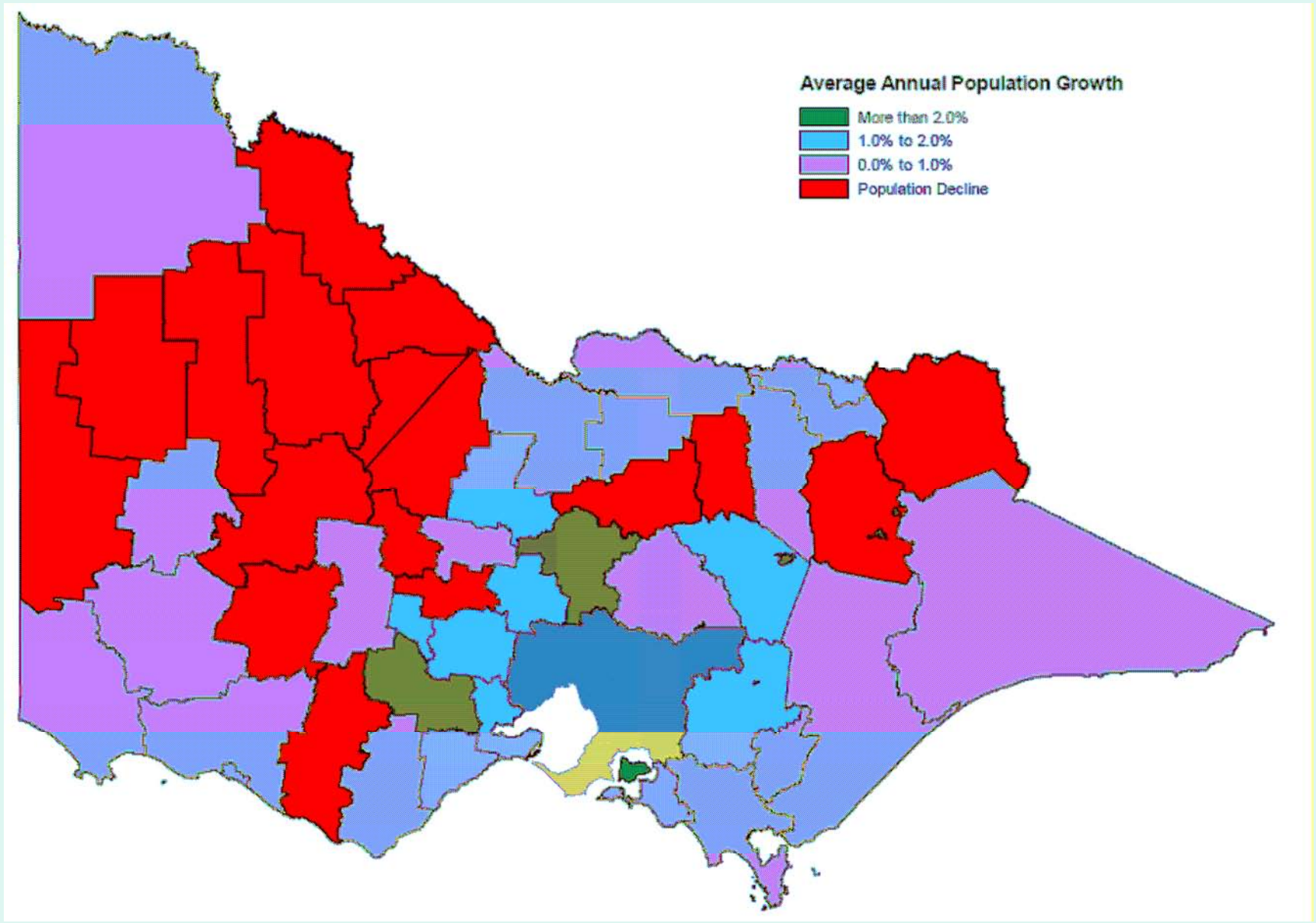
- **Regional drivers**:
  - regional policies or their absence
  - influence of city as “attractor” of peri-urban people and “supplier” of people to peri-urban area
  - residential/rural residential growth
  - region’s socio- spatial characteristics:
    - Amenity
    - Accessibility
    - Affordability (more houses approved 2001-07 than total of Ballarat, Bendigo and Latrobe

- **Socio-cultural values**

Demographic characteristics

Neither rural or urban - distinctive features

- Higher average annual growth rates (1.8%) than Victoria (0.9%) and Regional Victoria (0.8%)
- Mobile population (visitors, non-resident ratepayers, commuters, retirees, semi-retirees)
- Population ageing – growth in 45-64 age group, decline in younger age groups


Average Annual Population Growth
More than 2.0%
1.0% to 2.0%
0.0% to 1.0%
Population Decline

Who lives in peri-urban area?

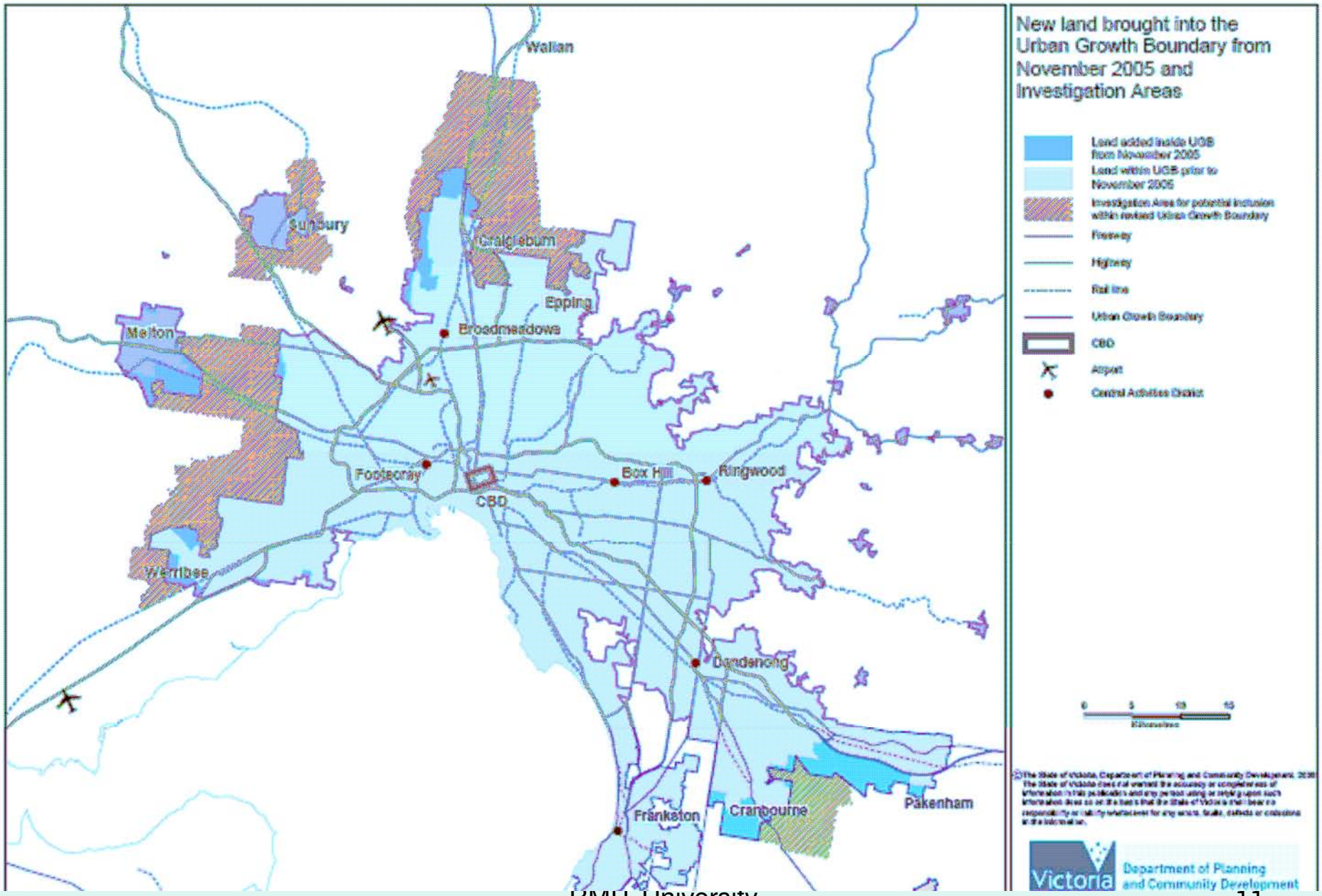
- Older, richer, higher educated, more mobile population than rural Victoria
- Increasingly attractive to managers and professionals (1/3 – 1/4 of employed persons); manufacturing still important with up to 15.6% of employment in LGAs; high % primary industry as sector of employment (average 8% compared to 2% Melbourne)

Where do they live?

- Population concentration is occurring in transport/commuter settlements with better quality infrastructure and in high amenity areas
- 30% of population lived in rural balance area in 2006
- Extensive commuting with 42% working outside a local government area and 28% commuting to Melbourne

Melbourne @ 5 million (2008)

- Melbourne's population expected to increase by 1 million by 2020, not 2030
- Development to be concentrated in 6 new central activities districts (Box Hill, Broad-meadows, Dandenong, Footscray, Frankston and Ringwood)
- Three employment corridors
- Planned corridor dwellings risen from 180,000 (2004), 225,000 (2005) - UGB expanded 2008 to allow for 284,000 new dwellings at low density of 15 d/ha.


New land brought into the Urban Growth Boundary from November 2005 and Investigation Areas
Land added inside UGB from November 2005
Land within UGB prior to November 2005
Investigation Area for potential inclusion within revised Urban Growth Boundary
Freeway
Highway
Rail line
Urban Growth Boundary
CBD
Airport
Central Activities District
Wallan
Sunbury
Craigieburn
Epping
Broadmeadows
Melton
Footscray
CBD
Box Hill
Ringwood
Werribee
Dandenong
Frankston
Cranbourne
Pakenham
Victoria
Department of Planning and Community Development

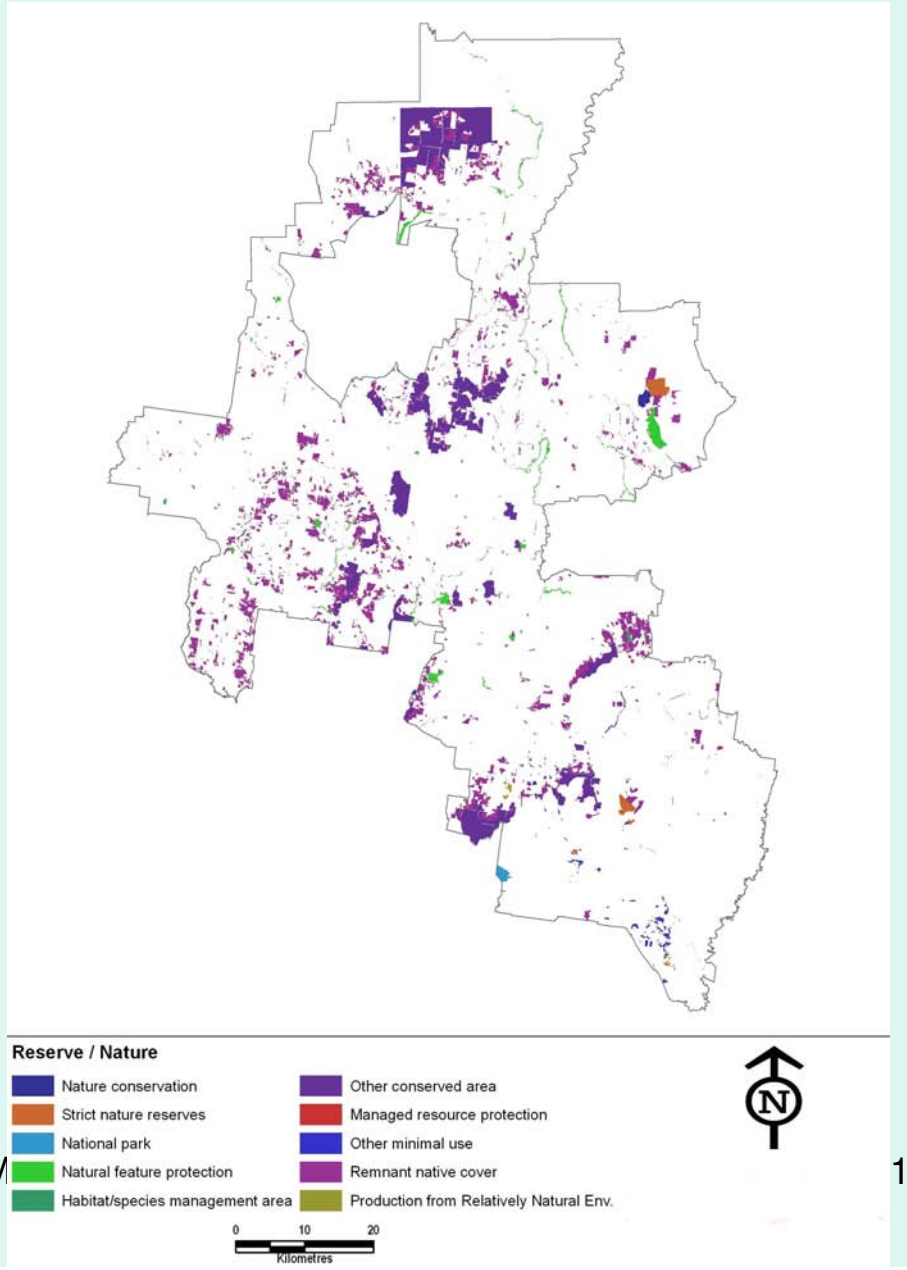
Regional connections – networked city

Figure 32. Regional cities and townships

Source: Department of Infrastructure, 2001

Public land in the Bendigo corridor

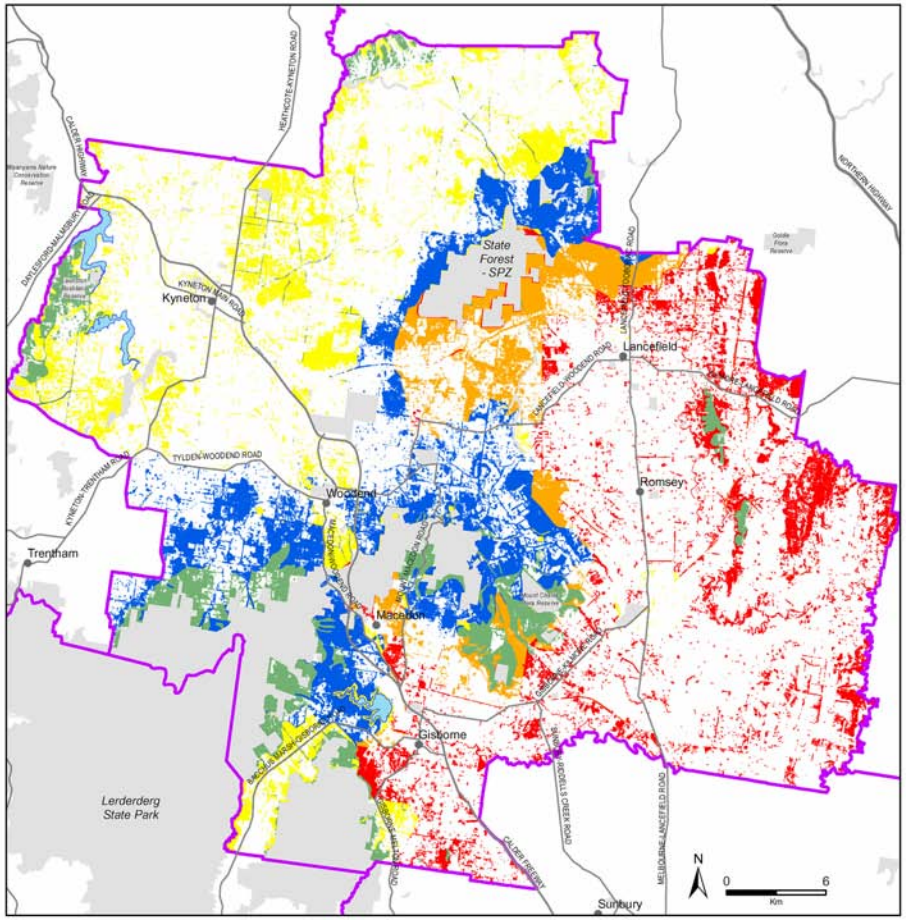
- Comprises 20% of land
- Fragmented, dispersed
- Threatened by private land uses, pressure from rising population
- Domestic tourism, visits stable or falling but remain a presssure
- Variable uses allowed



Biodiversity – native vegetation

- Significant remnant native vegetation remains: crucial to the region's amenity and prosperity - under increasing threat
- Extensive clearing has occurred – continuing: 2000 ha cleared 1994-2005 (1/2 in Mitchell and ¼ in Murrindindi)
- 44% of remnant native vegetation is on private land
- 96% cleared vegetation had a conservation significance rating

MACEDON RANGES



Map Prepared by Spatial Vision - 2008

Data sourced with permission of DSE, Victoria

Vegetation with Bioregional Conservation Status Rating

Private Land

Native Vegetation with BCS Rating of E, V , D or R

- without a Planning Overlay
- under a Vegetation Protection Overlay (VPO)
- under an Environmental Sensitivity Overlay (ESO)
- under both a VPO and ESO Overlay

Other

- Native Vegetation with BCS Rating of Least Concern
- Cleared or Non-native Vegetation

Public Land

- Public land including Conservation Reserves

Urban Areas

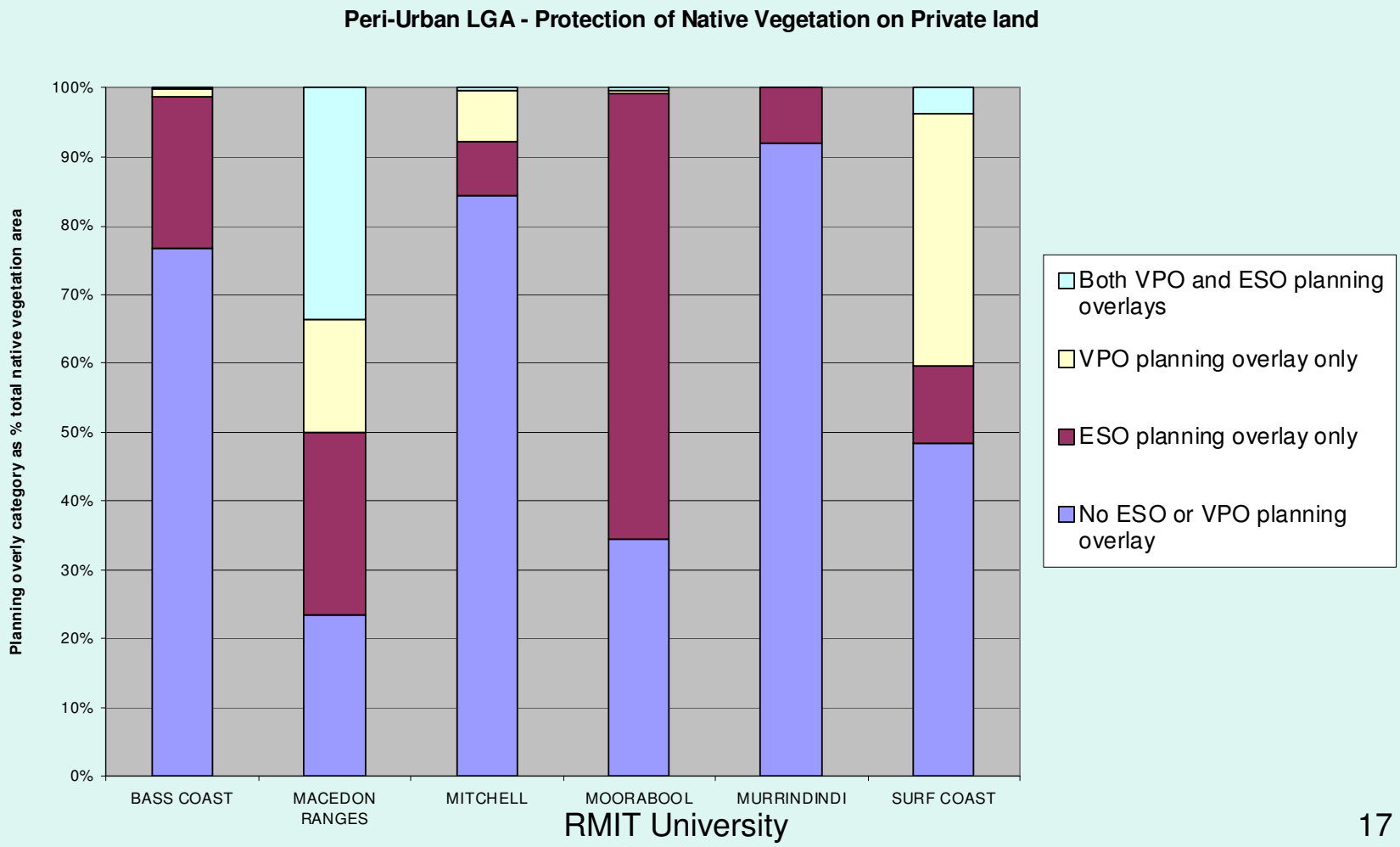
- Built Up Areas

Planning and protection

Planning controls inadequately matched to remnant vegetation

- 90% of land cleared had no VPO or ESO planning overlay
- Only 32% is now subject to either overlay: VPO rarely used except for Surf Coast and Macedon
- Only 34% of significant vegetation and 37% in high or good condition covered by VPO or ESO overlay

Use of overlays to protect native vegetation

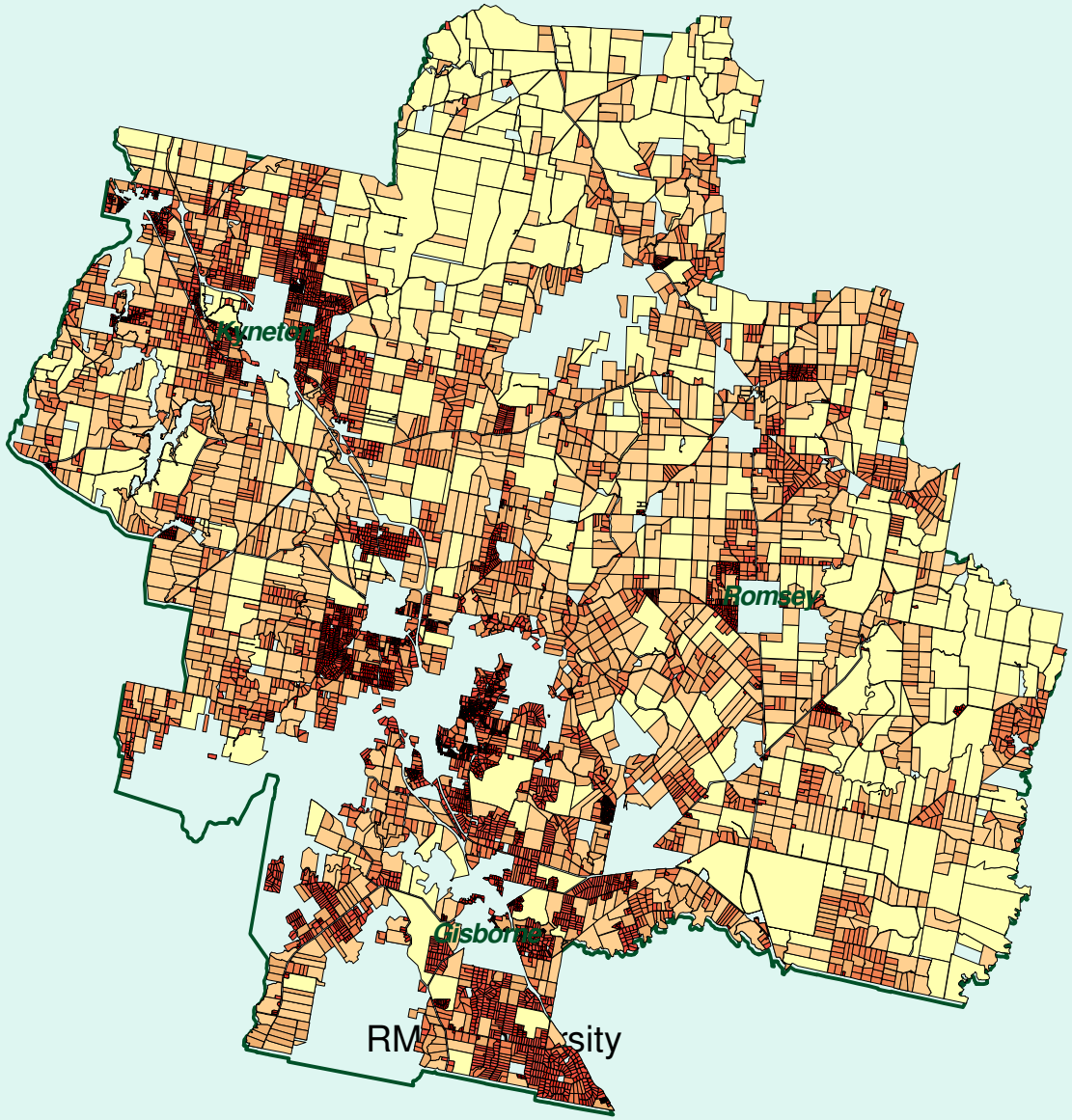


Trends in land use

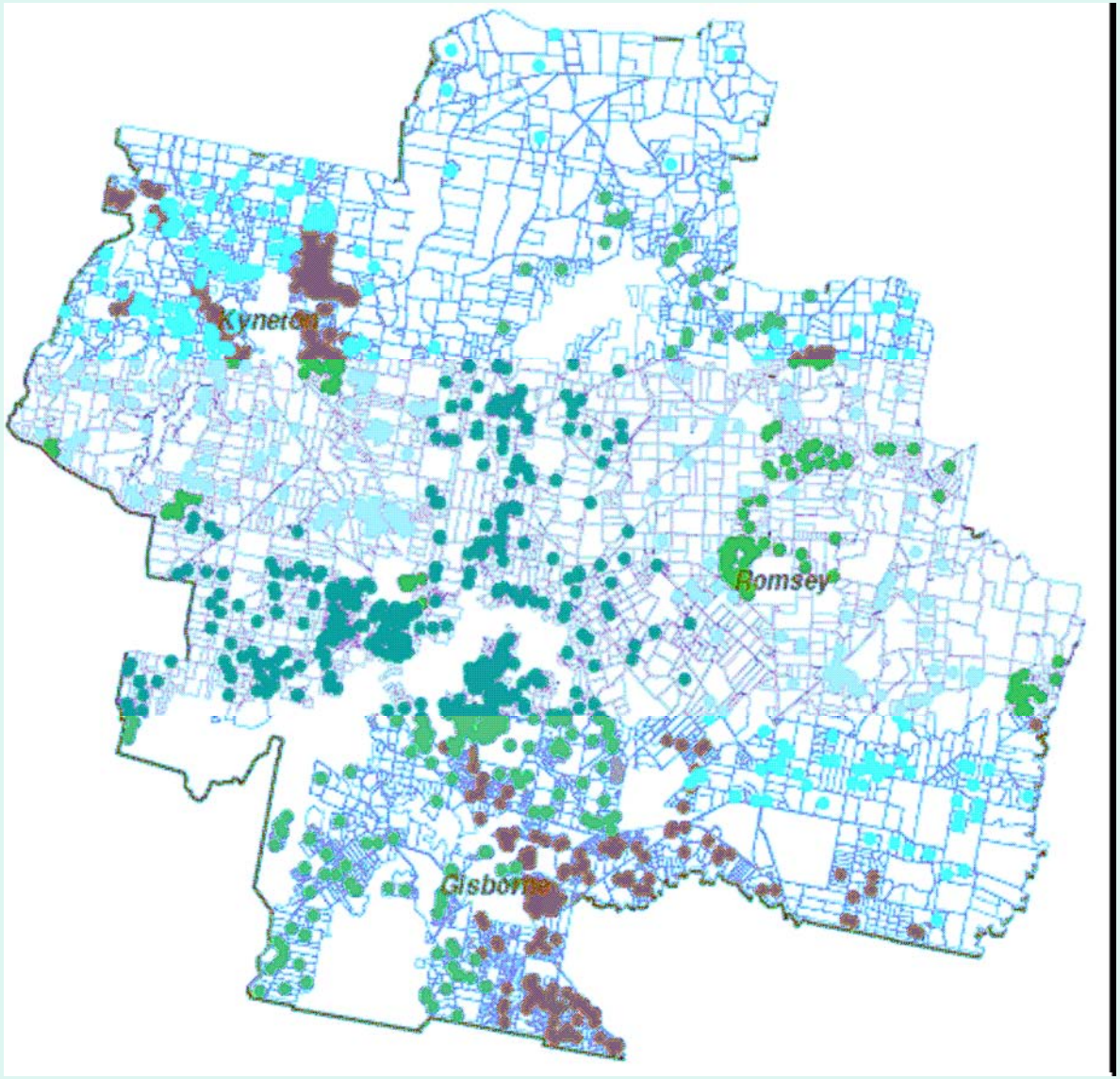
- Extensive land fragmentation:
  - 52,000 existing lots without dwellings exist
  - their development incompatible with agriculture, water needs and landscape protection

- Subdivision controls important but do not prevent development on existing small lots:
  - 75% of the 4181 new rural dwellings since 1998 built on lots <20ha and 60% on lots <8ha

Rural property size – Macedon Ranges



Dwelling Permits 1997-2007* (Macedon Ranges)

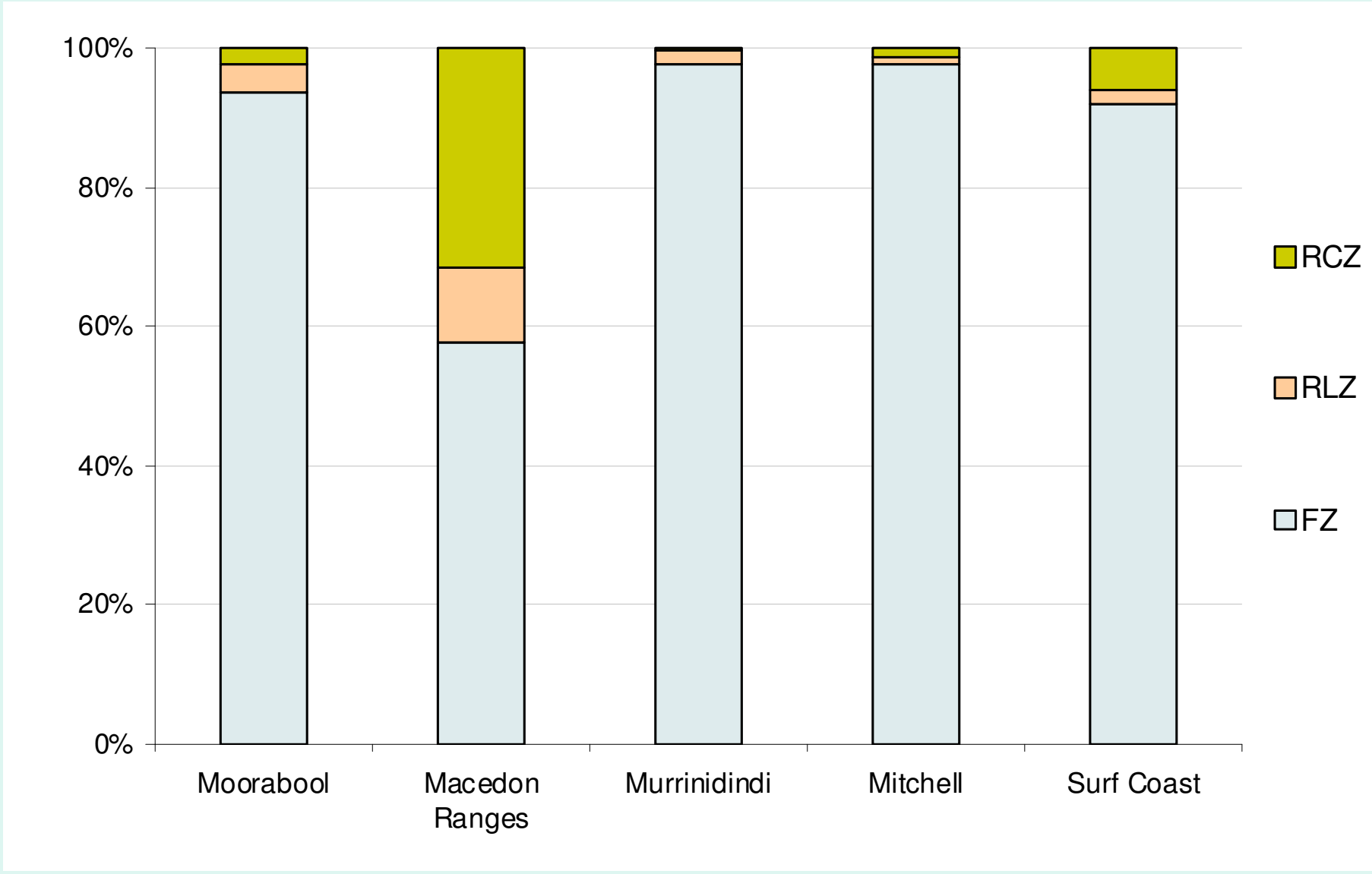


- FZ
- RCZ
- RLZ

Use of planning provisions

- Planning provisions not well matched to land characteristics
  - RCZ hardly used
  - Environmental overlays generally poorly matched to environmental needs: little used with some exceptions and wrongly applied
- Zones often matched inadequately to lot sizes: most LGAs include large numbers of small lots in FZ and RCZ

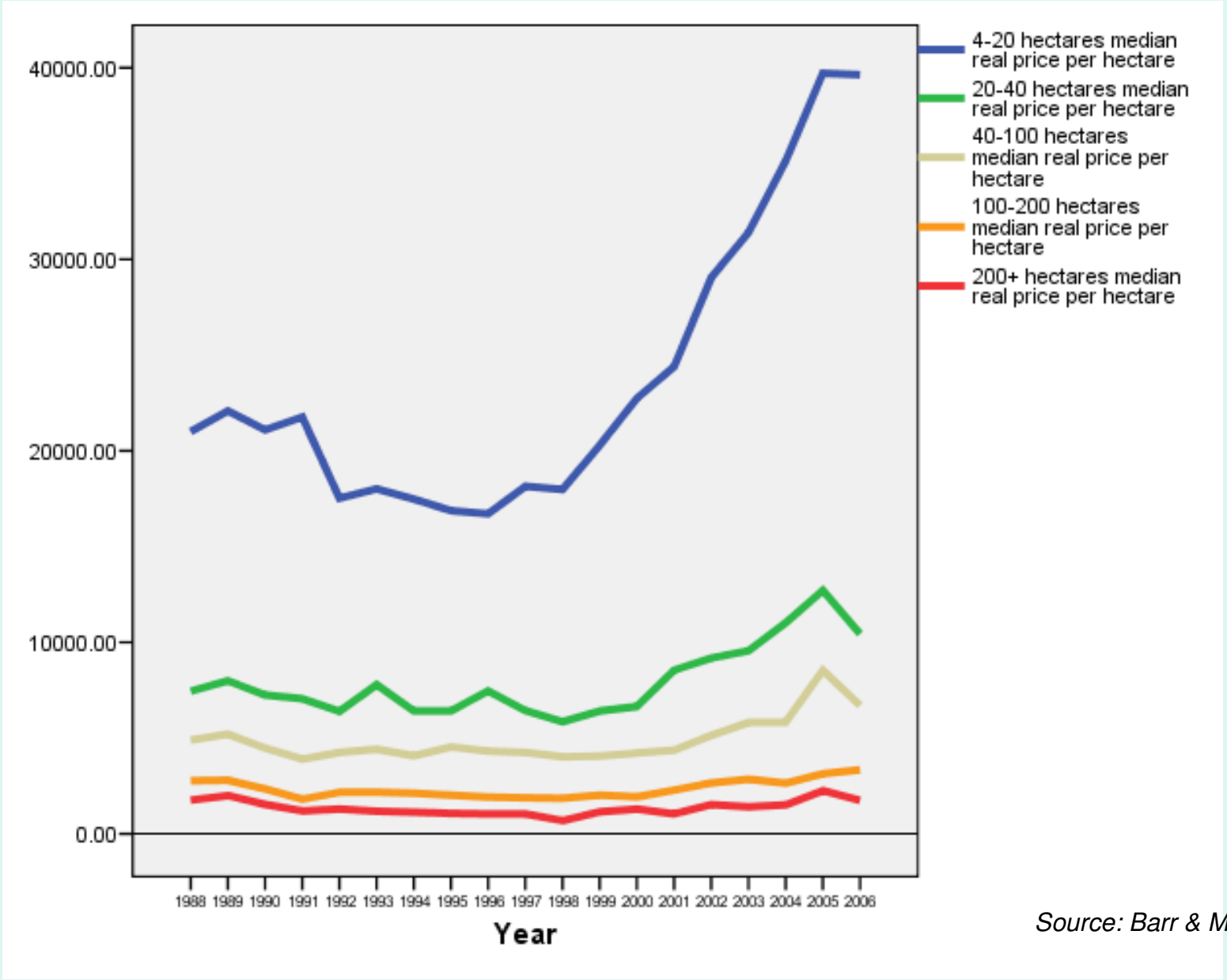
Proportion of each zone by LGA



Other land use issues

- **Retention of larger properties**:
  - properties 40ha and above comprise almost 28% of total, contain 49% of remnant vegetation (over 100 ha 22%), and are critical for the future of agriculture
- **Type of township development:**
  - concentrate development in larger or a series of smaller townships?
  - density, lot size, housing type and transport and other services

Median Price/ha by Property Size (Victoria $2006)



Source: Barr & McKenzie 2007

Water resources

In last 10 years

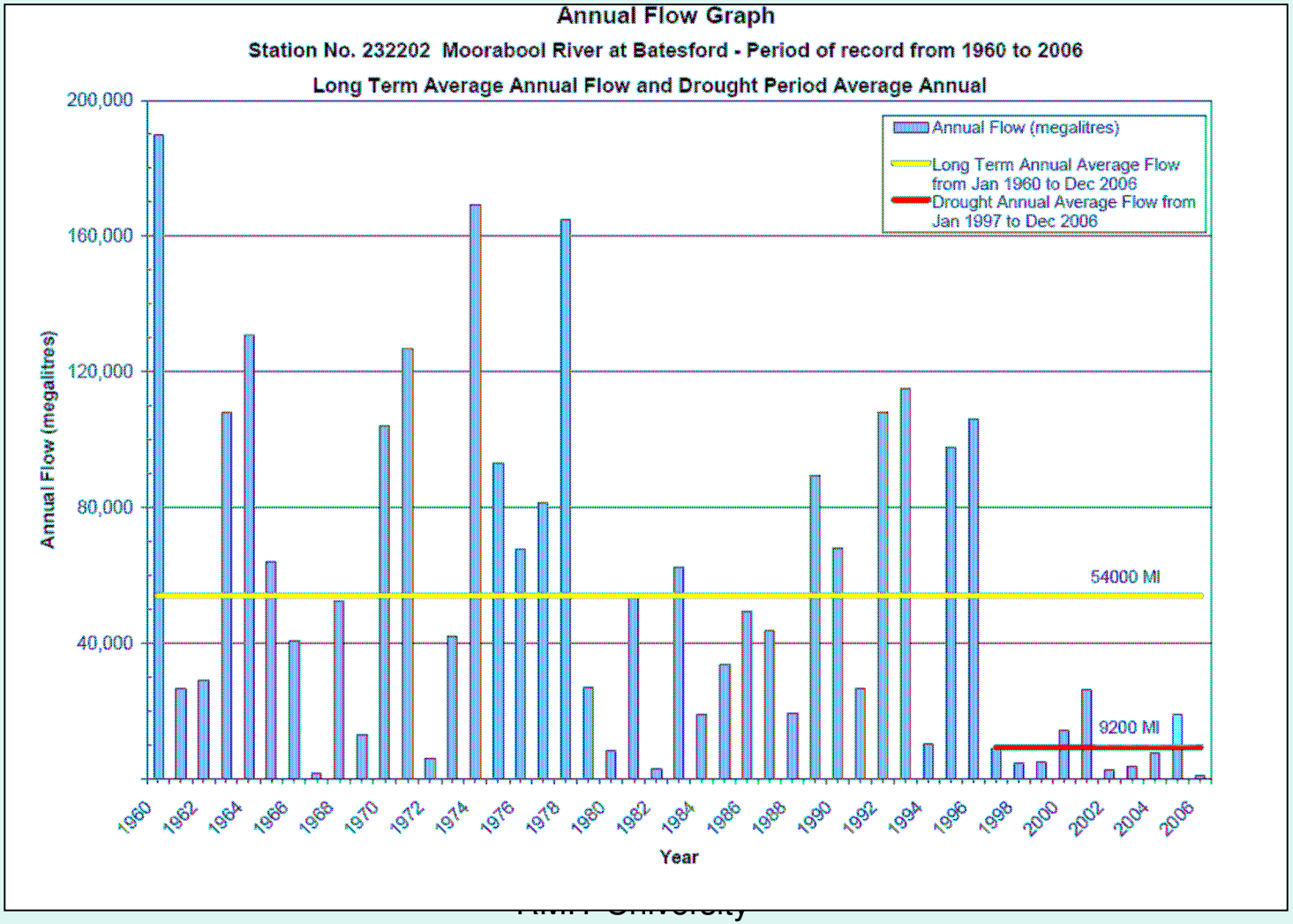
- dramatic decline in rainfall, inflows, runoff and storage levels
- increased average temperatures
- Environmental flows cut disproportionately with greater environmental than human impact
- Few rivers in good or excellent condition

Climate change will worsen current situation – possible 5 - 45% reduction in runoff

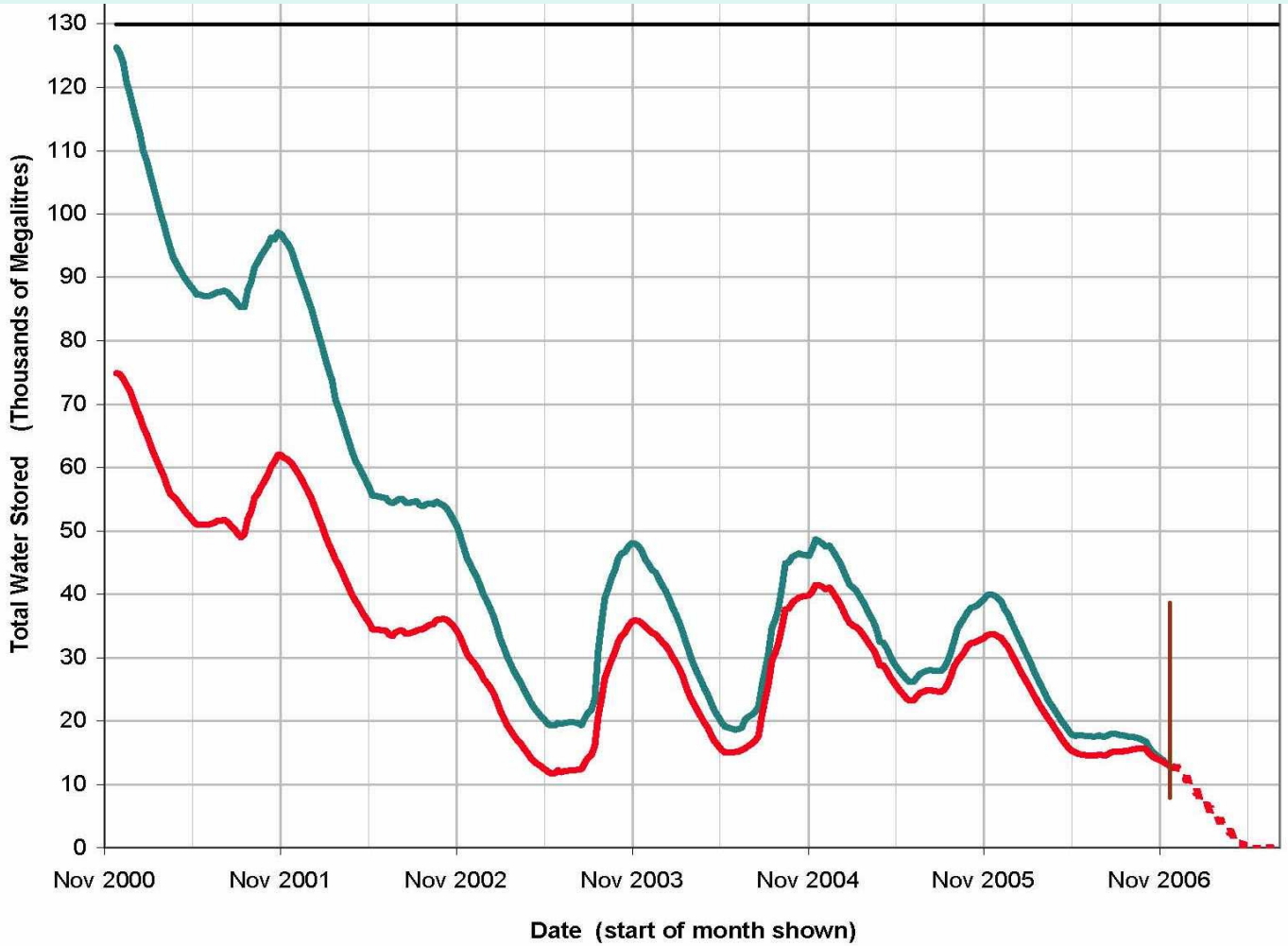
Campaspe Basin Surface water balance

	Long term average	**Average 2004-06**
Catchment Inflow (ML)	305,000	101,300
Interbasin transfers and water stored or released (ML)		3,160
Total available	**305,000**	**104,460**
Bulk Entitlement (ML)	64,740	39,770
Unregulated River Private Diversion (ML)	1,560	1,850
Farm Dams (ML)	28,800	28,000
Total Used	**95,100**	**69,620**
Losses (ML)	24,800	24,800
Catchment Outflows (ML)	**185,100**	**10,040**

Trends


Annual Flow Graph
Station No. 232202 Moorabool River at Batesford - Period of record from 1960 to 2006
Long Term Average Annual Flow and Drought Period Average Annual
Annual Flow (megalitres)
Long Term Annual Average Flow from Jan 1960 to Dec 2006
Drought Annual Average Flow from Jan 1997 to Dec 2006
200,000
160,000
120,000
80,000
40,000
Annual Flow (megalitres)
54000 Ml
9200 Ml
1960
1962
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
Year

Anticipatory responses - water



Total Capacity 129,950 ML
Coliban + Eppalock Share
Coliban Storages Only
Coliban Storages Projection
Current Date, 24 Nov 2006

On Fri 24 Nov 2006 ...

Upper Coliban 1.0 %
Lauriston 59.0 %
Malmsbury 5.0 %
Total Coliban 17.2 %
(Total Coliban 12,937 ML)

Combined Coliban storages plus share of Eppalock 10.0 %

Drawdown in week ending 24 Nov: 280 ML

Other water issues

- Land development affects water use
- S&D farm dams account for between 12 - 47% of water use (exception of Goulburn at 2%)
  - diverted about 2,800 ML in last 10 years
  - a further 5,600 ML diverted from dams under current rate of small lot development by 2018
- Some urban water systems to reach limits by 2010-14

Conclusions

- Business-as-usual paradigm: incremental, reactive growth with major long term cumulative impacts
- BAU regional governance: fragmentation
  - within government agencies
  - between government agencies
  - between councils, CMAs and other regional bodies and government agencies
- Little integrated policy or planning: yet critical interrelationships between land use, water supply, agriculture, biodiversity, costs etc.

Conclusions

- Will lead to costly, fragmented landscapes with serious impacts on economy and natural resources
- Doing nothing not an option because of past land fragmentation
- Alternative paradigm: decide an alternative future and means to achieve this through:
  - spatial and institutional integration
  - cross-sectoral policy measures to achieve alternative vision and regional policies