


Urban growth, coasts and climate change in Australia

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Coastal urban growth

- ▶ Nature, scale, rate
 - ▶ Diversity
 - ▶ Planning for risk and uncertainty
 - ▶ Policy instruments for planning adaptation
 - ▶ A pathway forward
 - ▶ Issues for further discussion
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Do we have a plan?



(Source: Flooded roadways in New Orleans, Coast Guard overflights, New Orleans, Aug. 29, 2005, www.katrina.com)



Photos by David Tatnall

Sand Sculptures by the Sea

Bondi and Cottesloe beaches



Cottesloe 2010, 4 – 23 March

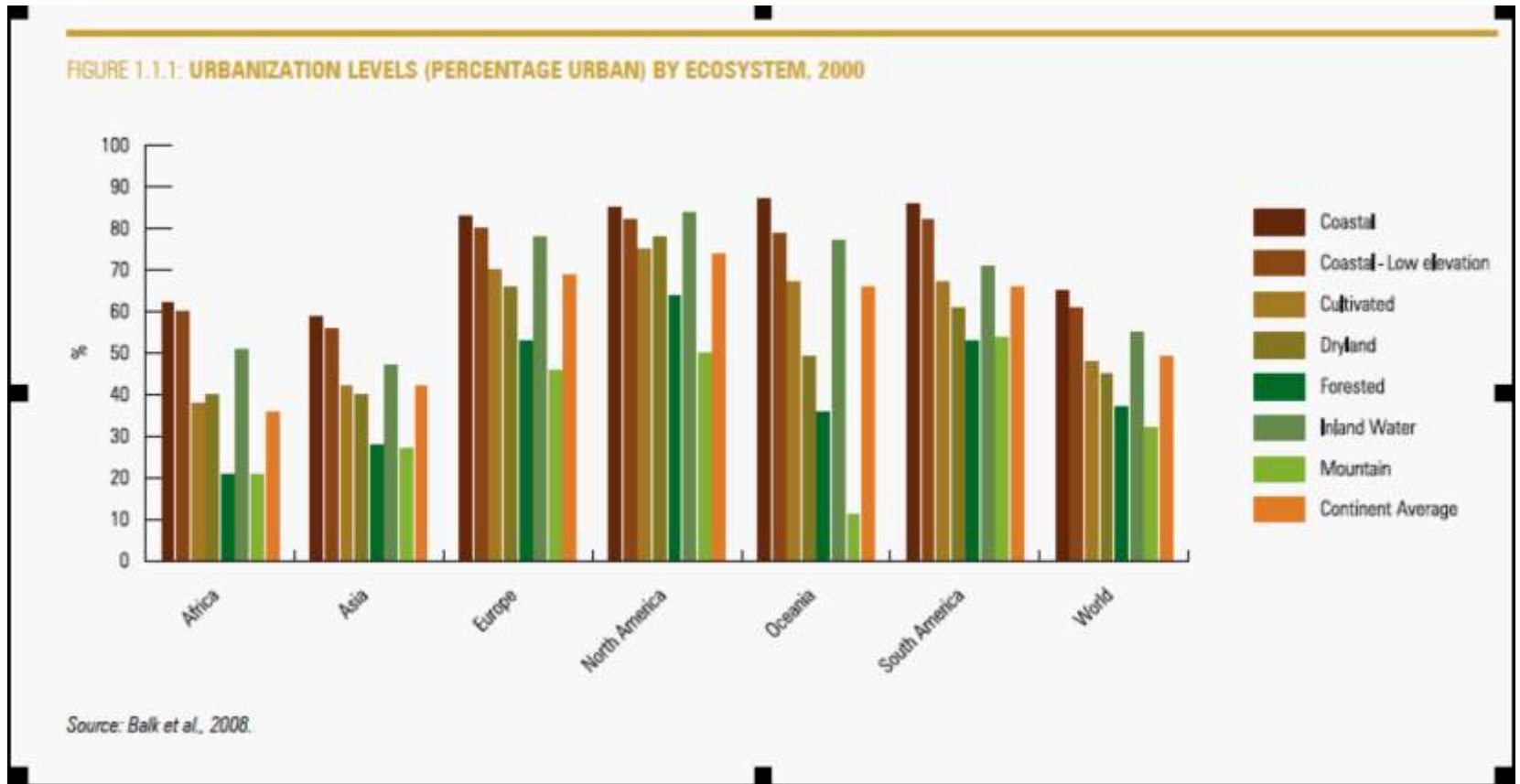
(Mark Grey-Smith, Sculpture by the Sea, Cottesloe 2009. Photo Peter Phoenix
<http://sculpturebythesea.com/cottesloe/index.html>)



Gold Coast QLD Development in 1930 Gold Coast QLD Development in 2007


(Source: Insurance Council of Australia 2008, Improving Community Resilience to Extreme Weather Events, p.4)

Global coastal urbanisation

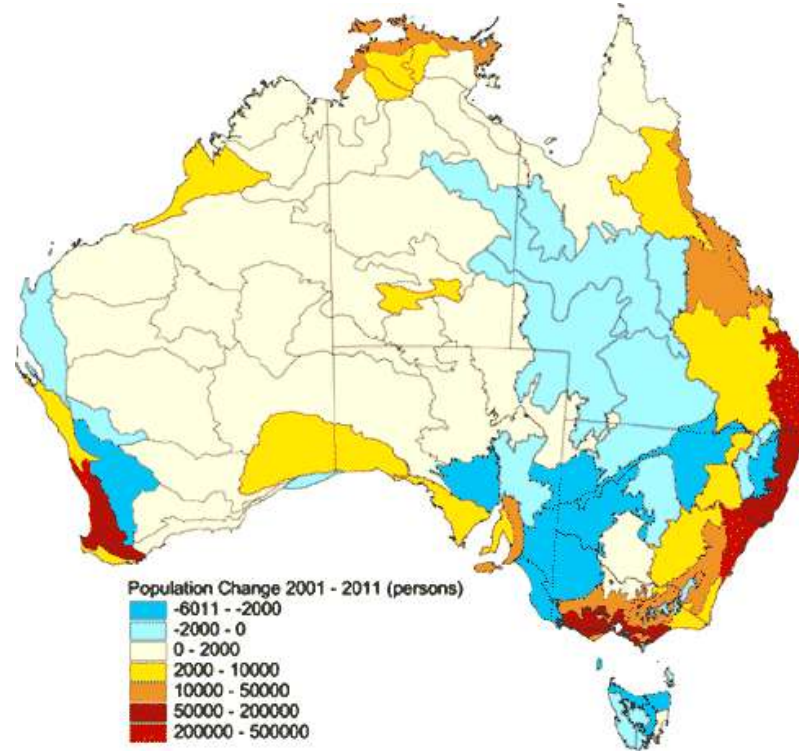


Source: UN Habitat 2008, State of the World's Cities 2008/9

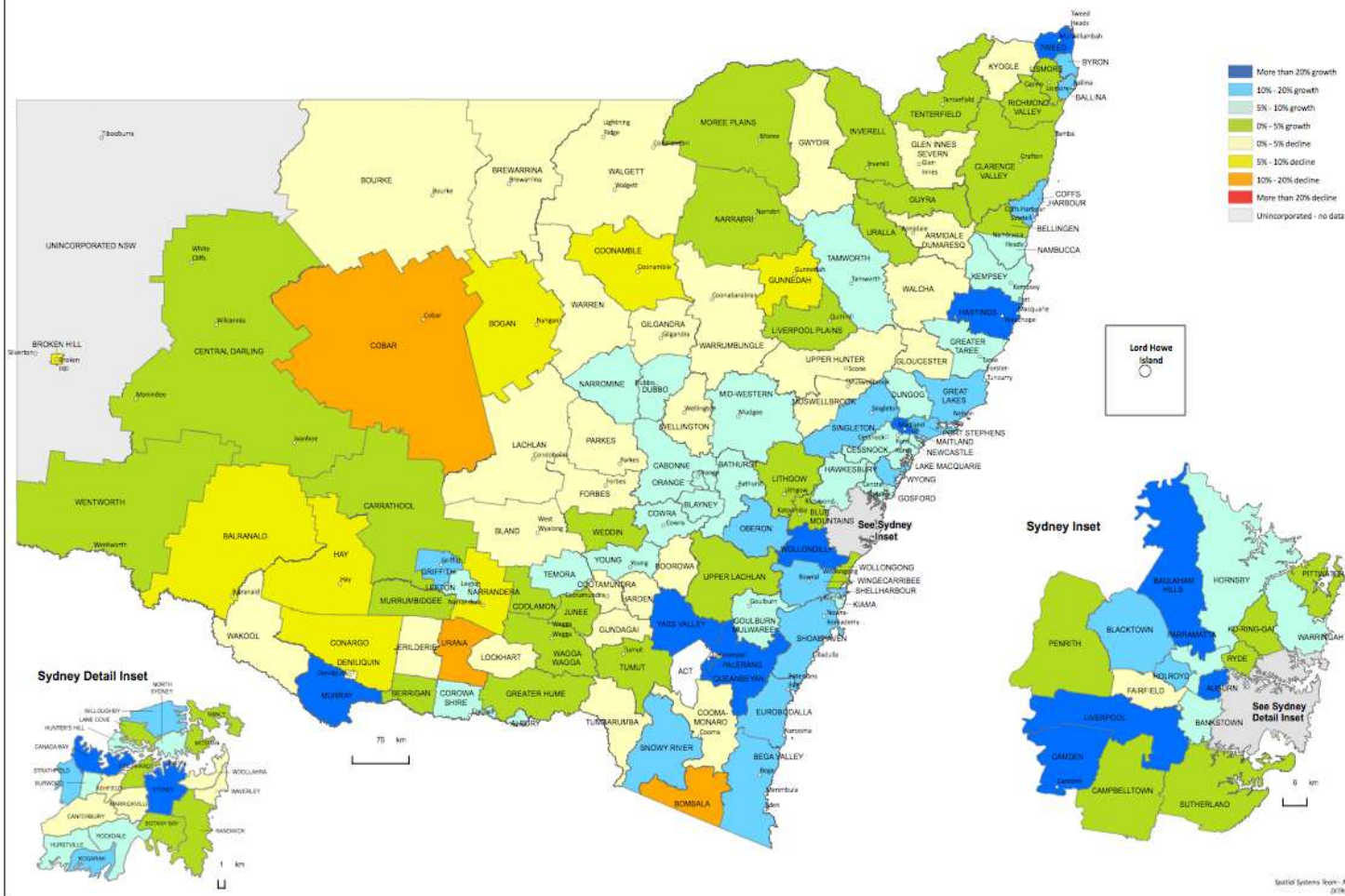
The scale and rate of urban growth

- ▶ **Australia to 2050**
 - Population growth projected to reach 35.9 million in 2050
 - ▶ **Pattern of urban settlement**
 - Distribution of population growth predominantly in capital cities and peri-urban areas
 - ▶ **Coastal urbanisation**
 - 90 percent of the population living in the coastal zone
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Coastal urbanisation in Australia




Source: 2006 State of the Environment Report



A diversity of coastal settlements

- Coastal commuters– suburbanised satellite communities
- Coastal getaways– small to medium towns with 3 hours drive of a capital city
- Coastal cities– substantial urban conurbations beyond the state capitals
- Coastal lifestyle destinations– predominantly tourism and leisure communities
- Coastal hamlets– small, remote coastal communities often surrounded by protected natural areas


(Gurran, N, Squires, C & Blakely, E, 2005, Meeting the Sea change challenge: Sea change communities in Australia, p3)



Significant steps forward

- ▶ Federal Parliamentary Inquiry into coasts and climate change
- ▶ Coastal Vulnerability Assessment
- ▶ COAG Decisions of December 2009
 - Strategic planning criteria
 - National Disaster Resilience Statement

Major policy instruments for coastal urban growth

- ▶ **National**
 - National settlement strategy, national planning criteria, major infrastructure investment, policy integration
 - ▶ **State**
 - State settlements strategies, regional coastal plans, State coastal adaptation policies
 - ▶ **Regional**
 - Regional coastal strategies, regional coastal vulnerability assessments
 - ▶ **Local**
 - Integrated urban planning for climate change
 - Statutory and regulatory frameworks for adaptation
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National strategic planning criteria

- ▶ Capital city strategic planning should:
 - be integrated
 - provide for near, medium and long term plans
 - provide for nationally significant issues including economic infrastructure and major policy
 - strengthen networks between cities
 - Identify priorities for investment
 - Encourage world class design and architecture
 - Provide effective implementation arrangements.

(derived from COAG Communiqué Dec 2009)





Communities
and Local Government

Planning shapes the places where people live and work and the country we live in. It plays a key role in supporting the Government's wider social, environmental and economic objectives and for sustainable communities.



PLANNING

**Planning Policy Statement:
Planning and Climate Change
Supplement to Planning Policy Statement 1**

TOMORROW'S CLIMATE
Today's Challenge™

December 2007

Coastal Settlement Framework: Spatial Growth Management



Coastal Settlement Framework: Spatial Growth Management

- High Growth Capacity: Large scale residential growth can be accommodated within and beyond current zoned urban limits*.
- Moderate Growth Capacity: Some growth potential beyond existing urban zoned land or through infill but within defined settlement boundaries*.
- Low Growth Capacity: Growth contained within existing urban or appropriate zoned land primarily through infill capacity and renewal within defined settlement boundaries*.

* In accordance with Strategic Planning undertaken for the particular settlement

Notes: Other Coastal Settlements: There are a variety of areas which include subdivisions and clusters of housing in rural areas which don't formally constitute a settlement. The objective is to manage these in relation to environmental impacts within existing limits of current development.

Inland Settlements: While not directly coastal in nature, inland settlements in a number of localities offer opportunities to absorb growth and provide required services within a regional coastal context.

Great Ocean Road Region Strategy: The settlements noted on diagram are consistent with this Strategy.


Legend

- Major Road
- Minor Road
- National Park
- Other Public Land
- Marine Protected Areas
- Other Settlement
- ★ Regional Centre

IMPORTANT NOTE ON CLIMATE CHANGE

The future impacts of climate change (eg sea level rise, storm surges, coastal erosion, flooding and bushfires) will fundamentally determine the shape, size, capacity and viability of existing settlements. Planning Authorities will be required to assess and avoid the future spatial impacts of these risks using the best available information to inform the spatial growth management parameters through the Settlement Planning process. This Growth Management Framework will be reviewed from time to time at the discretion of the Victorian Coastal Council and with future revisions of this Strategy.

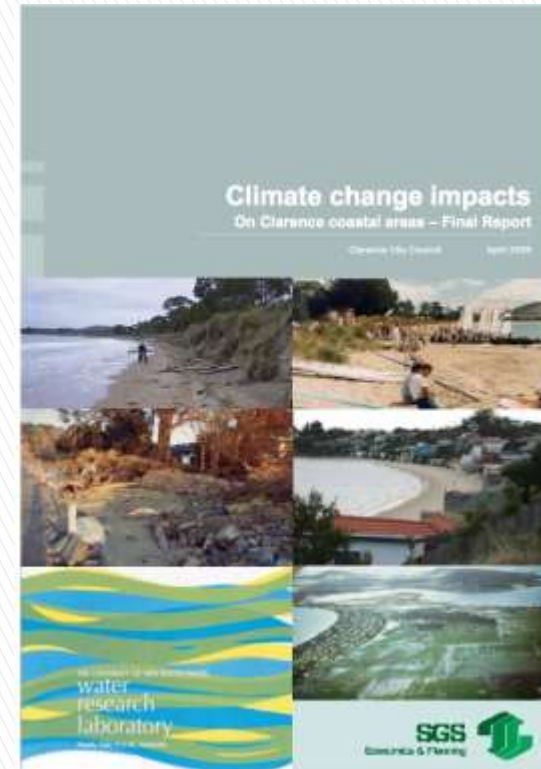
Re-emergence of regional planning

- ▶ South East Queensland regional planning
 - ▶ Sydney coastal councils
 - ▶ Westernport and Gippsland regional coastal planning
 - ▶ WA regional planning committees and regional coastal plans
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Local coastal planning responses




Gold Coast Queensland



Clarence Tasmania


Sustainable coastal planning

- ▶ An adaptive and systems approach to managing urban growth
 - ▶ A framework for integrated regional coastal planning in the context of national policy outcomes
 - ▶ Even greater importance on community engagement when planning for risk and uncertainty
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A tripartite agreement for sustainable coastal planning based on six principles

1. Agreed and shared outcomes
2. An adaptive and systems approach
3. Regional planning
4. Regional governance arrangements for implementation
5. Capacity building for coastal planning
6. Long term monitoring and research

(Norman, B, 2009, Integrated coastal management to sustainable coastal planning, PhD thesis, RMIT University)



Some issues for discussion

- ▶ A national urban planning framework linking national urban policy, national climate change objectives and national disaster resilience plans
 - ▶ Urban planning adaptive policy responses for on the ground implementation
 - ▶ Legal and liability issues
 - ▶ A nation wide skills base to plan for climate change.
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Some conclusions

- ▶ Significant population and demographic change with major implications for managing future coastal urban growth
 - ▶ Recent positive steps on strategic planning and climate change adaptation
 - ▶ An integrated national settlement strategy would facilitate longer term coastal planning and investment
 - ▶ Stronger links required between urban and regional planning, coastal management, climate change and disaster management
 - ▶ Regional coastal planning considering social, economic and environmental issues to be supported and expanded to apply more broadly
 - ▶ Regulatory system requires urgent review to incorporate adaptive planning responses
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