

Fact Sheet Four: Findings of the Regional Workshops Synthesis



As part of the Australian Government Department of Climate Change (DCC) National Climate Change Adaptation Program, the Sydney Coastal Councils Group (SCCG) have partnered with CSIRO Climate Adaptation Flagship working in collaboration with the University of the Sunshine Coast to undertake research on regional approaches to managing climate vulnerability in the Sydney region.

Project Phase Two: Regional Climate Change Workshops

As part of the second phase of the ‘*Systems Approach to Regional Climate Change Adaptation Strategies in Metropolises*’ project, the research team conducted climate change adaptation workshops with the 15 Member Councils of the SCCG from August to December 2007. The results of the 15 workshops were synthesised in order to identify and discuss the key barriers and opportunities to managing climate change vulnerability in the Sydney coastal region, and provides recommendations of key actions to improve Local Government adaptive capacity to managing those vulnerabilities. The findings were reported in the *Regional Workshops Synthesis Report: Sydney Coastal Councils’ Vulnerability to Climate Change* available via the SCCG website.

This report is a valuable resource to inform SCCG Member Councils internally, other levels of government and organisations of the barriers that Councils in the Sydney Coastal region face in adapting to climate change. The report also provides support to the future development for joint councils, regional or individual council projects to assist Councils better adapt to climate change.

The aim of climate change workshops was to raise the awareness of SCCG Member Council delegates of their relative vulnerability to potential impacts of climate change and assist them to identify key climate issues, associated linkages and the barriers and opportunities to managing these impacts.

The 257 workshop participants attended the 1 day workshops and consisted of both Council staff and Councillors from most Council sections and departments.

The workshop objectives were to:

- communicate the outputs of the vulnerability modelling undertaken across the region;
 - assist Sydney Coastal Councils identify climate issues and the linkages between issues;

- assist Sydney Coastal Councils identify and understand the direct and indirect drivers and consequences of climate change impacts;
 - assist Sydney Coastal Councils prioritise issues and;
 - assist Sydney Coastal Councils identify their perceived vulnerability to issues and their capacity to manage them.

The day workshops started by informing the participants of the results and findings from, project phase one the relative vulnerability assessment of: (i) extreme heat and human health effects; (ii) sea-level rise and coastal hazards; (iii) extreme rainfall and stormwater management; (iv) bushfire; and (v) natural ecosystems and assets, which found that there is significant spatial variability throughout the Sydney coastal region with respect to climate change vulnerability (see Preston et al., 2008).

Based on the stimulus from the relative vulnerability assessment, workshop participants created systems diagrams of key climate change drivers, impacts, and management responses – and identified the relationships between those concepts (See figure 1).

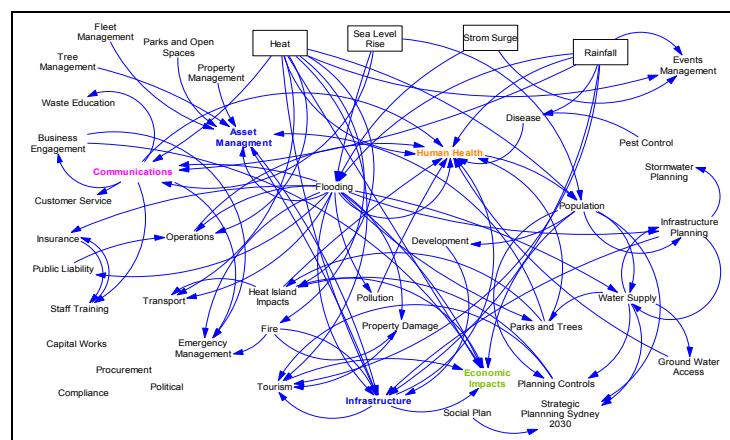


Figure 1: A systems diagram or “Horrendogram”.

The systems diagrams were used as a way of visualising the complex relationships between the range of issues discussed and their associated connections. It allowed for councils to identify the drivers and indirect or flow-on consequences of actions, and reflect on how their concerns may be related to other sections and departments within Council. From the systems diagram Councils identify their priority climate issues, which were then discussed in small groups in terms of the barriers and opportunities to managing them.

A notable feature from the workshop analysis is the breadth of social, environmental and economic issues acknowledged by Council staff as being directly and indirectly related to climate change.

Many workshop participants were concerned about potential liabilities as a result of climate change; commenting that current council plans generally did not take climate change into account. Additionally, many participants were unclear as to the extent of Local Government statutory responsibilities in relation to climate change.

Based on the relative vulnerability assessment and regional workshops, key cross-cutting issues identified as affecting Local Councils' capacity to adaptively manage climate change included:

- Communities – specifically in relation to human capital, diversity of perceptions, unsustainable mindsets, disconnection between attitudes and behaviours, magnification of climate risk, and community education;
- Infrastructure – specifically in relation to current under capacity of existing infrastructure, aging infrastructure, existing non-climate related vulnerabilities, lack of alternatives, lack of Council control over infrastructure, and community expectations regarding infrastructure;
- Planning and decision-making – specifically in relation to jurisdictional overlaps, planning inconsistencies, political pressures, resources for planning, and legacies and tradeoffs.

Other barriers to Local Government managing climate change included issues related to: water management; funding; development; State Government; Councils' own management approaches; politics; transport management; Australian Government; knowledge; and flooding management. Some opportunities for Local Government to manage climate change were also identified by workshop participants and related to potential improvements in development assessments; policy; education; capacity; leadership; knowledge, and community action.

As initial steps to building the adaptive capacity of Local Governments, it is recommended that:

- Local Governments play an active role in directing, participating in, and validating climate change adaptation research – thereby ensuring that climate change assessments have maximum benefit for decision-making; recognition of complexity and flow-on effects of council interventions
- There is increased cross-Council dialogue regarding climate change adaptation strategies and interventions;
- Councils embed climate change considerations across all sections of Council operations;
- Councils and other tiers of government review and amend policies, planning controls, planning standards, development regulations, and legislation to facilitate climate change adaptation;
- That the State and Australian Governments articulate responsibilities for climate change adaptation and adequately resource adaptation responses;
- Government investments into research on climate change 'exposure' be expanded to also include 'sensitivity' and 'adaptive capacity' in order to comprehensively understand climate change vulnerability;

- Resourcing to enable Local Governments to implement adaptation strategies;
- Resourcing to enable councils to monitor and evaluate climate change adaptation interventions frameworks to determine the reasons for success or failure of climate change adaptation interventions

The research highlights a lack of information and understanding upon which Local Governments are able to base management responses in relation to climate change adaptation. An important finding is that Local Governments recognise a vast range of biophysical and socio-economic climate change issues likely to impact on their operations and constituents, although they also highlight deficiencies in terms of understanding the extent of each of the potential impacts and limited capacity to manage those issues.

The *Regional Workshop Synthesis Report* findings have been used to support the third project phase; the *Case Studies of Adaptive Capacity* in selecting the case study councils and investigation topics of communities, infrastructure and planning and decision-making. The case studies phase aims will deepen the understanding of the most common cross-cutting barriers to managing climate change vulnerability and identify what is preventing Councils from adapting to climate change. Key areas for interventions will also be identified to assist Councils to improve their management of the cross-cutting barriers and enhance their capacity to adapt to climate change through future management and investment decisions.

Conclusions

Local Governments in the Sydney coastal region clearly recognise climate change as an issue that will affect their strategic and day-to-day operations.

Through greater understanding of the three key cross-cutting regional barriers; communities, infrastructure, and planning and decision-making to adapting to climate change in Sydney, Local Governments will be better placed to scale-up their individual efforts in order to more effectively respond to climate change at the regional scale.

Reference

Smith, T.F., Preston, B., Gorddard, R., Brooke, C., Measham, T.G., Withycombe, G., Beveridge, B. and Morrison, C. (2008), *Regional Workshops Synthesis Report: Sydney Coastal Councils' Vulnerability to Climate Change* (available from the SCCG website).

Preston, B.L., Smith, T., Brooke, C., Gorddard, R., Measham, T., Withycombe, G., McInnes, K., Abbs, D., Beveridge, B., and Morrison, C. (2008) *Mapping Climate Change Vulnerability in the Sydney Coastal Councils Group* (available from the SCCG web site).

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